

**THE IMPACT OF NEW CAPITAL GAINS TAX ON ASSET
ALLOCATION OF INVESTMENT GROUPS IN NAIROBI**

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DECLARATION

This research project is my original work and has not been presented to any other University or institution of higher learning for academic award.

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D63/ 75225/2014

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

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DEDICATION

This project is dedicated to my family, Mr. Mwai Ole Kihu and friends for their unwavering support during my study period.

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ABBREVIATIONS

ANOVA – Analysis of Variance

CGT – Capital Gains Tax

KAIG - Kenya Association of Investment Groups

MPT - Modern Portfolio Theory

PPE - Property, Plant and Equipment

RBA - Retirement Benefits Authority

SPSS – Statistical Package for Social Studies

ABSTRACT

Asset allocation decision remains the central element of portfolio construction in the investment industry today. However, one of the key issues facing an individual is how to allocate wealth among alternative assets mostly in the presence of capital gains tax. Many assets face both profits from capital gains and dividends, which are taxed at different rates. Thus, this study examined the impact of new capital gains tax on asset allocation of investment groups in Nairobi County, Kenya. The study used a descriptive research design and a sample of 32 investment groups in Nairobi County were selected for the study using stratified and simple random sampling methods. Data for the study was collected using questionnaires which were administered to the sampled group leaders from each investment group. The data collected was analyzed using descriptive and inferential statistics with the help of the Statistical Package for Social Studies. To test hypothesis the classical linear regression was used. The study findings established that capital gain tax compliance costs had a positive and statistically insignificant relationship with asset allocation decisions while capital gains tax liability had a negative and statistically significant relationship with asset allocation decisions by investment groups in Nairobi County. The study also established that capital gains tax knowledge had a positive and statistically significant relationship with asset allocation decisions and by investment groups in Nairobi County. The study concluded that there is an inverse relationship between the amount of capital gain tax payable and asset allocation decisions by investment groups since an increase in CGT liability would reduce the expected returns from the investments which may discourage investors from selling their asset and instead prefer holding them. The study recommended that the Kenya Revenue Authority and the government at large should initiate training programs on capital gains taxation to enlighten investors on the different investment which qualify for capital gain tax.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Tax is a major source of government revenue all over the world. The classical function of a tax system is the raising of the revenue required to meet government expenditure. Taxation is the most important source of revenue for modern governments, typically accounting for ninety percent or more of their income (Afubero and Okoye, 2014). The tax system is an opportunity for the government to collect additional revenue needed in discharging economic development and creating a conducive business environment for its citizens. The economic development of any country depends on the amount of revenue generated for the provision of infrastructure in that given country (Aderibigbe and Zachariah, 2014). Revenue generation is the nucleus and the path to modern development since most governments use tax proceeds to render their traditional functions, such as the provision of public goods, maintenance of law and order, defense against external aggression, regulation of trade and business to ensure social and economic maintenance (Aderibigbe and Zachariah, 2014).

Taxes play an important role in the decision-making process of individuals concerning their consumption and investment plans. Additionally, taxes on returns of any financial assets alter the benefits of saving for future consumption and thus affect the trade-off between current consumption and investment (Dammon, Spatt and Zhang, 2001). The tax rules investors are facing are a potentially important factor influencing the household portfolio structure (Marekwica, 2007). Taxes substantially complicate the portfolio choice problems of many investors; in particular, optimally exploiting the realization-based feature of capital gain taxation

might be a challenge to the average private investor (Kraft, et al., 2010). According to Turton (2008), taxes can consume a substantial portion of returns in an individual's portfolio.

The central problem confronting investors in practice is how to efficiently invest the funds held in their taxable and tax-deferred savings accounts. The problem involves making both an optimal asset allocation decision i.e., deciding how much of each asset to hold and an optimal asset location decision i.e., deciding which assets to hold in the taxable and tax-deferred accounts (Dammon et al., 2004). Incomes from investments, which comprise of dividends and interest income, are taxed as ordinary income on the date that they are paid at the constant rate. Realized capital gains and losses are subject to a constant capital gain tax rate of where we assume that the full proceeds of capital losses can be used Gallmeyer et al (2006). Thus, investors make decisions to reduce the tax burden of owning financial assets, while maintaining an optimally diversified portfolio over time (Dammon et al., 2004).

1.1.1 Capital Gains Tax

Capital gains tax is a tax imposed on the increase in value of marketable assets between the date of their acquisition or some fixed date and the time of disposal, when the tax becomes payable. According to Stuart (2008) CGT is a tax on the increase in the value of an asset between its acquisition and its disposal. Broadly speaking, this means its sale price minus its purchase price, though assets that are acquired or disposed of in other ways. Capital gains arise from the sale of capital assets sold by individuals and trustees; gains made by companies are included in profits and subject to corporation tax (Stuart, 2008). Capital assets include investment assets, such as stocks and bonds; assets (including land) held for long-term investment rather than commercial

purposes and self-created patents goodwill and going-concern value created by a firm. In addition to the sale of capital assets, capital gains can arise from the sale of real or depreciable property under some circumstances (Desai and Gentry, 2003).

Capital gains taxes are different from most other taxes on capital because they are levied on a realization basis. The amount of capital gains tax paid depends on when an asset is sold and not when the capital gain actually occurred. If assets appreciate, the longer you hold an asset the lower the discounted value of taxes paid on increases in value, which took place just after you acquired the asset (Kovenock and Rothschild, 1985). Capital gains and losses are long-term if the asset is held for more than a year and short-term, if otherwise. To determine taxes, three separate calculations must be made on the net short-term gain, which includes net long-term gain, net short-term gain plus net long-term gain (Smith and Smith, 2008). However, in many countries around the world, capital gains are taxable at a constant capital gains tax rate. In tax-systems with limited capital loss deduction, an optimal asset allocation decision depends on the investor's total wealth before trading, his unrealized capital gains, his loss carry forward and the length of the remaining investment horizon (Marekwica, 2007).

The CGT tax has been used in many countries to discourage speculation and close a loophole that makes tax avoidance possible. Proponents of CGT argue that capital gains tax is most often justified on fiscal equity grounds and excluding capital gains from the income tax base is an important structural weakness in the income tax system, which leads to tax avoidance and the misallocation of productive investment resources. The opponent of CGT argue that if capital gains go untaxed, individuals are encouraged by the tax system to invest their savings in assets

that provide returns in the form of capital gains e.g. property rather than income producing assets e.g. equipment and machinery. However, Stuart (2008) argues that higher CGT rates might discourage saving, investment and entrepreneurship, but these could be encouraged in better-targeted ways. On the other hand, low rates of capital gains tax are essential to reward difficult and risky entrepreneurial activity. Hungerford (2010) posits that capital gains tax reductions are often proposed as a policy that will increase saving and investment, provide a short-term economic stimulus, and boost long-term economic growth.

1.1.2 Asset Allocation

Asset allocation is the process of distributing investment capital across the various asset classes in an allowable universe and is widely regarded as one of the most important decisions an investor faces (Brown et al., 2010). Asset allocation involves dividing an investment portfolio among different asset categories, such as stocks, bonds, and cash. A vast array of investment products exists - including stocks and stock mutual funds, corporate and municipal bonds, bond mutual funds, lifecycle funds, exchange-traded funds, money market funds (Securities and Exchange Commission, 2011). According to Blair (2014), asset allocation is how much of your wealth is invested in each of the various asset classes, such as cash, stocks, and bonds, as well as real estate or other alternative assets. Munk (2003) posits that asset allocation is sometimes used for the allocation of investments to major asset classes, e.g. stocks, bonds, and cash and other asset categories including real estate, precious metals and other commodities, and private equity also exist, and some investors may include these asset categories within a portfolio.

Assets allocation is one of the most important factors in assessing the long-term risk and return characteristics of a portfolio. Poor asset allocation decisions can cause the returns of the average

stock or bond investor to lag the respective markets. Guidolin and Timmermann (2005) points out that asset allocation decision is a key determinant of their portfolio performance and asset allocation decisions can only be made in the context of a model for the joint distribution of asset returns. In the investment management industry, it is accepted that an investor's initial strategic asset allocation decision is the most important determinant of the portfolio's investment performance (Brown et al., 2010). Therefore, asset allocation is important because it has a major impact on whether you will meet your financial goal. In addition, the objective of a good asset allocation plan is to develop an investment portfolio that will help you reach your financial objectives with the degree of risk you find comfortable.

According to Perac, (2000) the goal of asset allocation is to maximize returns at a prudent level of risk or to minimize the risk involved in achieving a certain return. The process of determining the appropriate asset allocation involves an analysis not only of available investment asset classes but also of the liabilities of an entity such as a retirement system. The needs and preferences of the investor are the basic building blocks of an asset allocation. In asset allocation an investors determines asset categories with investment returns that move up and down under different market conditions within a portfolio, and which an investor can protect against significant losses (Securities and Exchange Commission, 2011). The general approach of an asset allocation strategy is to determine which asset classes to invest in based on your risk tolerance and return objectives since a proper asset allocation plan provides a long-term framework to structure a portfolio (Baird Private Wealth Management Research, 2013).

1.1.3 Impact of Capital Gains Tax on Asset Allocation

Several studies exist on the impact of capital gain tax on asset allocation of different organization. For example, Leland (1999) examined the effects of capital gains taxes on optimal trading strategies and concluded that, capital gains taxes can be deferred by not selling, but not selling an asset may lead the portfolio to become dangerously over-invested in that asset. In addition, Gallmeyer et al (2006) investigated the role of realized capital gain taxation on an investor's consumption-portfolio problem with two risky stocks and a riskless money market. when investors are faced with asset allocation and consumption decisions, capital gain taxation plays an important role in the investor's optimal strategy. The study findings established that an investor's portfolio choice problem is integrally linked to realized capital gain taxation.

According to Kovenock and Rothschild (1985) as compared to taxation on an accrual basis, the capital gains tax discourages sales of appreciated assets hence the lock in effect. This is because assets subject to capital gains taxation are generally held for a longer time by investors who hold assets, which have increased in value. Kovenock and Rothschild (1985) since capital gains tax is a transactions tax, it diminishes trading and that in the United States, the sale of an asset can be put off until death, to avoid paying capital gains taxes. Blair (2014) also established that taxes on capital gains, dividends, and ordinary income play a huge role in determining how much portfolio an investor gets to keep. Thus, enhancing the tax efficiency of your portfolio should be an important element of your asset allocation strategy. For example, investors in the highest tax bracket may want to allocate more assets to tax-exempt municipal bonds or to growth stocks that will produce long-term capital gains rather than dividends. Inanga and Emenuga (1996) also

noted that excessive taxation of capital gains from the sale of shares encourages investors to retain their shares and take out their profits in dividends.

Additionally, Maroun et al (2012) explored the perceived fairness of CGT, in order to contribute to a better understanding of the impact of CGT. The study revealed that there are potential sources of unfairness inherent in the imposition of CGT, which included the possibility that that CGT gives rise to double tax imposes a high burden on taxpayers' ability to bear the tax load and may undermine the upliftment of the poor. Hsuku (2008) also investigated the effect of capital gains tax on investors' optimal dynamic consumption and portfolio choice when there is predictable variation in return volatility and established that conservative investors will be subject to a negative effect of the capital gain tax option. Further, Marekwica (2007) revealed that the taxation of capital gains has several impacts on the tax-timing decisions of private investors. The study established that CGT reduces the expected after-tax return, which might lead some investors to decide not to invest their funds but to consume them and having high unrealized capital gains in some assets might discourage investors from sell assets to avoid paying the capital gains tax and thus get locked-in.

1.1.4 Investment Groups in Kenya

An investment group is any collection of individuals or legal persons in any form whatsoever including but not limited to: societies registered under the Societies Act, Partnerships and Limited Liability Companies, whose objective is the pooling together of capital or other resources with the aim of using the collated resources for investment purposes (KAIG, 2014). Accordingly, an investment group can be defined as a group of less than one hundred individuals

who meet for the purpose of pooling resources and investing. The most widely used word for an Investment Group or Club in Kenya is *Chama*. *Chama* is the general word for a savings or investment group in Kenya. A single group can serve different financial functions and *Chamas* are effective networks through which investors can meet regularly outside their homes and pool resources. The *Chamas* are different devices and carry out separate functions, like merry-go-round, accumulation, lending, and welfare, each of those functions would be registered separately (Kenya Financial Diaries, 2014). *Chamas* are usually founded on two basic reasons i.e. the common bond between the members and the financial goal of the group.

Investment groups (*chamas*) have been an important feature of Kenyans' monetary practice for decades (Kusimba et al., 2013). Initially, *Chamas* were a preserve of old rural women who periodically met and collected money for one of the members in what was known as merry-go-round (Gichuru, 2014). However, the *Chama* movement evolved out of the desire of ordinary people to creatively solve their social welfare problem and satiate market needs (Kinyanjui, 2012). Most *Chamas* started with the basic idea of improving the material and social condition of its members. Nowadays, investment groups in Kenya have grown from being welfare groups to being investment groups whose intent is to create wealth from pooled resources. In *Chamas*, asset allocation refers to how the *Chama* distributes their capital among various asset classes. Asset classes refer to types of investments, the main being cash, fixed interest, property and shares. There are typically differing levels of risk and return associated with the asset classes, and different minimum suggested investment timeframes. Thus, every member of the *Chama* needs to understand the characteristics of all the asset classes in order to make sound investment choices (KAIG, 2014).

1.2 Statement of the Problem

Asset allocation decision remains the central element of portfolio construction in the investment industry today. However, one of the key issues facing an individual is how to allocate wealth among alternative assets (Elton and Gruber, 1997) mostly in the presence of capital gains tax. Many assets face both profits from capital gains and dividends, which are taxed at different rates. These two types of profits differ in two ways. On one hand dividends are taxable the year they are obtained, while capital gains are taxable the year when the asset is sold and the gains are realized (Marekwica, 2007). Hendershott et al. (1991) points out that capital gains tax encourages taxpayers to hold onto assets with accrued gains instead of disposing them by sale or exchange in order to compound income tax free until realization hence creating a lock in effect. Studies have shown that capital gains taxation along with taxation of ordinary dividend and interest incomes leads to double taxation and may have severe effects on savings and investment. The capital gains tax (CGT) has been reintroduced in Kenya following an amendment in the 2014 Finance Act. The CGT had been suspended in Kenya since 1985 to encourage investment in the real estate sector as well as spur growth in the stock market (PWC, 2014). In the case of a company, CGT will apply on all forms of property, including business assets, immovable assets, shares in companies, intangible assets, obligations and easements amongst others (except the gains arising from the transfer of motor vehicles are not taxable for companies). In the case of an individual, CGT will apply only to immovable property and marketable securities. The rate of tax will be 5% on the gain made, which is the final tax (Ngumy and Kang'ethe, 2014). Thus, the impact of the reintroduction of CGT on the Kenyan market, and its effect on asset allocation of investments group in Nairobi is worthy of an investigation.

There are several studies, which have been carried out on asset allocation and capital gains internationally and locally. Globally, a study by Nash, Wilder and Stocks (2002) examined the effect of capital gains tax rates on an investment company's capital gains realizations and found that investment companies exhibit economic response behavior consistent with the lock-in effect characteristic of individual investors. However, the study was based on investment companies as opposed to investment groups. In Kenya, Gichuru (2014) analyzed the degree to which these investment groups (Chamas) have embraced the concept of strategy planning and established that lack of knowledge or expertise was a major challenge. In addition, Omondi (2013) examined the relationship between asset allocation and financial performance of pension funds in Kenya and established that asset allocation was a significant factor in pension fund performance. Similarly, Kasingiu (2012) examined the effect of capital gains tax on total tax revenue in Kenya and concluded that capital gains tax would have a negative and insignificant contribution to total tax revenue.

However, the above studies examined different aspects and their findings cannot be generalized to the study context. In addition, none of the studies has investigated the impact of capital gains on asset allocation of investment groups. As such, the capital gains tax in Kenya has been suspended for quite a period hence little is known on its impact on asset allocation decisions. Thus, this study intends to answer the question, what is the impact of new capital gains tax on asset allocation of investment groups in Nairobi?

1.3 Objectives of the Study

To examine the impact of new capital gains tax on asset allocation of investment groups in Nairobi.

1.4 Value of the Study

The study will be of benefit to investment groups since investment groups are highly dependent upon their members to make sound and profitable investment decisions. Capital gains tax should be factored-in when investing. Investment groups therefore may find this report useful, so that they can make informed decisions on behalf of their members.

The study will be of significance to policy makers like the government, the Kenya revenue authority, Capital markets authority and the Treasury; they may use the study findings to formulate policies that will enhance revenue collection and budget formulation in the country.

In addition, the study will be of benefit to future researchers and scholars since it will add on to the existing literature on the impact of new capital gains tax on the asset allocation of investment groups in Nairobi. The study will also increase the knowledge base, and thus enable future researchers to build upon the concepts resolved by this study. The study will also be valuable to research institutions, students and other researchers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter represents the existing literature on asset allocation and capital gains tax. It entails the theoretical review, a review of the determinants of asset allocation, empirical literature review and conclusion from literature review.

2.2 Theoretical Review

To explain the concept of asset allocation, this study will explore the modern portfolio theory, the utility theory and the prospect theory.

2.2.1 Modern Portfolio Theory

The modern portfolio theory originated with the mean-variance analysis of Markowitz (1952). Markowitz and other contributors created a framework for constructing portfolios of securities by quantitatively considering each investment in the context of a portfolio rather than in isolation. According to Markowitz (1952), investors should pick assets after they put into consideration the mean and variance or equivalently the mean and standard deviation of portfolio returns over a single period (Campbell and Viceira, 2001). Much of modern investment theory and practice builds on Markowitz' assumption that in many cases an investor can be concerned solely with the mean and variance of the probability distribution of his or her portfolio return over a specified future period (Sharpe, 2007).

The Modern portfolio theory (MPT) primary optimization inputs include expected return, expected standard deviation as a proxy for risk and expected correlations between assets. The modern portfolio theory emphasizes on constructing optimal portfolios and is ultimately about the balancing expected returns, against their contribution to the overall portfolio risk. In Markowitz diversification, investors optimize their investments in terms of their expected return and variance. An investor is assumed to estimate the mean return and variance of return for each asset being considered for the portfolio over the single period (Elton and Gruber, 1997). Sharpe 1964 and others extended and simplified MPT by compressing security characteristics into asset class groupings for which a single market factor (beta) serves as a proxy for a multitude of security-level characteristics (Podkaminer, 2013).

In modern portfolio theory the major concepts that most investors should be aware of is the relationship between the risk and the return of a financial asset. It is common knowledge that in general there is a positive relationship between the risk and the expected return of a financial asset. In other words, when the risk of an asset increases, so does its expected return. Allocation of capital among a set of assets is an optimization problem: an investor could consider maximizing the return per unit of risk or solving for the minimum risk portfolio. Using variance as a measure of risk and assuming normality of returns leads to optimal allocation under normal market conditions (Bensalah, 2002). Thus, asset allocation is a more suitable application of mean-variance analysis than is stock portfolio selection (Kaplan, 1988).

2.2.2 Utility Theory

The utility theory lies at the heart of modern portfolio theory. The theory postulates that utility functions, give a way to measure investor's preferences for wealth and the amount of risk they are willing to undertake in the hope of attaining greater wealth. A utility function measures an investor's relative preference for different levels of total wealth (Norstad, 1999). The key assumption is that the goal of an investor is to maximize the expected utility of the return from his or her portfolio. Associated with the portfolio return in each state of the world is a utility, which measures the happiness, associated with the total return in that state. The expected utility of the return in a state equals its utility times the probability that the state will occur. The expected utility of the portfolio is then the sum of the expected utilities of its returns in the states (Sharpe, 2007). In asset allocation, different investors can and will have different utility functions, but we assume that any such utility function satisfies the two critical properties of non-satiation and risk aversion (Norstad, 1999).

Economics emphasizes that individuals make decisions under uncertainty by maximizing the expected value of an increasing concave utility function of consumption. In a one period model, consumption is end of period wealth. In general, maximizing expected utility of ending period wealth by choosing portfolio weights is a complicated stochastic nonlinear programming problem. The utility function is assumed to be increasing and concave, because it is assumed that investors prefer more consumption to less and that the investors are risk averse. In terms of approximating the utility function, this translates into expected utility being increasing in expected return i.e. more is better than less and decreasing in variance i.e. the less risk the better (Kaplan, 1988). The principle of expected utility maximization states that a rational investor,

when faced with a choice among a set of competing feasible investment alternatives, acts to select an investment, which maximizes his expected utility of wealth (Norstad, 1999).

2.2.3 Prospect Theory

The prospect theory proposed by Kahneman and Tversky (1979) describes how people frame and value a decision involving uncertainty. Kahneman and Tversky (1979) first proposed the prospect theory frame work and later also defined for choice under uncertainty in 1991. According to the prospect theory, people look at choices in terms of potential gains or losses in relation to a specific reference point, which is often the purchase price. The prospect theory describes how people frame and value a decision involving uncertainty. It explains an investment phenomena based on expected utility maximization. In addition, the prospect theory is a descriptive model of decision making under risk, originally developed to help explain the numerous violations of the expected utility paradigm documented over the years.

Prospect theory is a well-established descriptive theory of human behavior under risk. The idea that people care about changes in financial wealth and that they are loss averse over these changes is a central feature of the prospect theory of Kahneman and Tversky (1979). Accordingly, investors derive direct utility not only from consumption but also from fluctuations in the value of their financial wealth. They are loss averse over these fluctuations, and the degree of loss aversion depends on their prior investment performance (Barberis, 2001). Thus, average decision-makers are not economic automatons; instead, from time to time they are affected by emotions and cognitive hindrances in making rational decisions.

Prospect theory postulates that agents form decisions in two steps. First, a certain decision is framed; also called the editing phase i.e. considered as a self-contained decision often in very narrow setting. In the second step, the decision is taken by maximizing the prospective value function defined for the problem (Kahneman and Tversky, 1979). The asset allocation problem is viewed as one involving choice, where the planner chooses the best mix of assets over time in their portfolio to meet a certain objective at the planning horizon.

2.3 Determinants of Assets Allocation

2.3.1 Time Horizon

Time horizon is the expected number of months, years, or decades an investor or investors will be investing to achieve a particular financial goal. An investor with a longer time horizon may generally feel more comfortable taking on a riskier, or more volatile, investment because he or she can wait out slow economic cycles, and the inevitable vicissitudes in the markets. In addition, an investor saving up for a teenager's college education would likely take on less risk because he or she has a shorter time horizon (Securities and Exchange Commission, 2011). Guidolin and Timmermann, (2005) also posit that time-variations in investment opportunities are represented by a flexible regime switching process, therefore asset allocations therefore varies significantly over time.

2.3.2 Risk Tolerance

Risk tolerance indicates the ability and willingness to lose some, or all of the original investment in exchange for greater potential returns. For instance, an aggressive investor is more likely to risk losing money in order to get better results while conservative investor tends to favor

investments that will preserve his or her original investment (Securities and Exchange Commission, 2011). The appropriate asset-allocation strategy depends on an investor's risk tolerance and the return the investor hopes to achieve to meet their investment goals. Risk tolerance is also influenced by the period for achieving investment goals, the investor's financial situation, and the investor's feelings about money and investing (Blair, 2014). According to Bensalah (2002), asset allocation should take into account the risk profile since better understanding of the risk profile will lead to the use of appropriate assumptions and measures of risk.

2.3.3 Asset Classes

Asset classes are bundles of risk exposures divided into categories such as equities, bonds (or debt), and real assets based on their financial characteristics. Asset classes are as independent as possible, with little overlap and, in aggregate, cover the investment universe with minimal gaps. Typical asset allocation relies heavily on sub-asset classes. Asset classes can be broken down into building blocks, or factors, that explain the majority of the assets' risk and return characteristics. A factor-based investment approach enables the investor theoretically to remix the factors into portfolios that are better diversified and more efficient than traditional portfolios (Podkaminer, 2013).

2.3.4 Investor's Goals

Investor's goals are critical while doing financial planning and assets allocation. It is noteworthy that the concept of allocating funds to different asset classes based on their nearness to the investor's goals, helps not only to diversify risks across different asset classes but also in

rebalancing the investor's portfolio. The first step in developing an asset-allocation strategy is to articulate the investment goals. By developing and implementing an asset-allocation strategy that fits an investor's individual goals and situation, the investor can take more control of their financial plan (Blair, 2014).

2.4 Empirical Review

Leland (1999) examined the optimal trading strategy for an investment fund, which in the absence of transactions costs would like to maintain assets in exogenously fixed proportions. The study showed that the optimal policy involves a no-trade region about the target stock proportions. The study found that the optimal response to a capital gains tax is to allow proportions to substantially exceed their target levels before selling. When an asset's proportion exceeds a critical level, selling should occur to bring it back to that critical level. Capital gains taxes lead to lower optimal initial investment levels. Similarly, starting from a zero-investment position, it is optimal to invest less initially in asset classes that have high transactions costs, such as emerging markets stocks.

Dammon, Spatt and Zhang (2003) examined the impact of an investor's capital gains tax liability and the existing risk exposure upon the optimal portfolio and rebalancing decisions. The study captured the trade-off over the investor's lifetime between the tax costs and diversification benefits of trading. The study findings established that the investor's incentive to re-diversify the portfolio declines with the size of the capital gain and the investor's age. Unlike conventional financial advice, the study established that the reset of the capital gains tax bases and the

resulting elimination of the capital gains tax liability at death, suggests that the optimal equity proportion of the investor's portfolio increases as he ages.

Desai and Gentry (2003) analyzed how corporate capital gains taxes affect the capital gain realization decisions of firms. The study outlined the tax treatment of corporate capital gains, the consequent incentives for firms with gains and losses, the efficiency consequences of these taxes in the context of other taxes and capital market distortions, and the response of firms to these incentives. Despite receiving limited attention, corporate capital gain realizations have averaged 30 percent of individual capital gain realizations over the last fifty years and have increased dramatically in importance over the last decade. By 1999, the ratio of net long-term capital gains to income subject to tax was 21 percent and was distributed across a variety of industries suggesting the importance of realization behavior to corporate financing decisions. Time-series analysis of aggregate realization behavior demonstrates that corporate capital gains taxes impact realization behavior significantly. Similarly, an analysis of firm-level investment and property, plant, and equipment (PPE) disposal decisions and gain recognition behavior similarly suggests an important role for these taxes in determining when firms raise money by disposing of assets and realizing gains.

Dammon, Spatt and Zhang (2004) investigated the optimal inter-temporal asset allocation and location decisions for investors making taxable and tax-deferred investments. The study showed a strong preference for holding taxable bonds in the tax-deferred account and equity in the taxable account, reflecting the higher tax burden on taxable bonds relative to equity. For most investors, the optimal asset location policy is robust to the introduction of tax-exempt bonds and

liquidity shocks. Numerical results illustrated optimal portfolio decisions as a function of age and tax-deferred wealth. Interestingly, the proportion of total wealth allocated to equity is inversely related to the fraction of total wealth in tax-deferred accounts.

Kraft, Marekwica and Munk (2010) studied the impact of tax-optimizing portfolio decisions in a life cycle model with unspanned labor income and realization-based capital gain taxation. For realistic parameterizations of the study model, certainty equivalent welfare gains from fully tax-optimized portfolio decisions was less than 2% of present financial wealth and lifetime income compared to a heuristic portfolio policy ignoring the taxation of profits (capital gains, interest and dividend payments). Compared to a heuristic portfolio policy that only ignores the realization-based feature of capital gain taxation and instead assumes mark-to-market taxation, these gains are less than 0.5%. However, if capital gains are forgiven at death (as in the U.S.), investors with strong bequest motives face substantial welfare costs when not tax-optimizing their portfolio decisions towards the end of the life cycle.

Kinoti (2009) analyzed the significance of four factors that influence asset allocation decisions of pension fund managers in Kenya. The study analyzed the global asset allocation behavior of pension fund managers regulated by the RBA in Kenya over the period 2001 to 2007. The study found that historical asset allocation was a significant factor influencing allocation. Legislation and asset returns were also found to be significant factors influencing a pension fund managers' investment decisions in Kenya. The study also found that legislation as is structured was a significant factor influencing fund managers' decisions; the impact on asset allocation was however minimal. The study concluded that the current regulatory regime is appropriate for the

industry as it appears to be guiding diversification and that there is minimal difficulty of compliance.

Kagunda (2011) examined the evaluation of asset allocation by fund managers and the financial performance of unit trusts in Kenya. The research was conducted through a survey study. The target population of this study was the unit trusts that consisted of equity-based funds and schemes that deal with stocks traded in Kenya. The study established that for unit trusts available to Kenyan investors, asset allocation can explain a significant amount of the difference in returns across time and hence a primary determinant of return performance for these trusts. The study also found out that asset allocation by fund managers and the financial performance of unit trusts in Kenya are better resolved for performance to be effective in a very great extent. In addition, the study established that asset allocation by fund managers, and the financial performance of unit trusts in Kenya, is a comprehensive important measurement and mitigation method used by various organizations.

Micheni (2013) examined portfolio management strategies used by Centum Investments, and to determine the effects of portfolio management strategies on financial performance of Centum investments. This study adopted a survey research method to show the relationship between portfolio management and performance practices. The study findings established that individual security selection strategies were not positively correlated to the leverage strategies and yield spread strategies. Individual security selection and yield curve strategies were positively correlated. The findings also revealed a positive correlation between the yield curve strategies and yield spread strategies. The findings of the study revealed a strong correlation between the

predictor's variables (leverage strategies, yield spread strategies, interest rates expectation strategies, individual security selection strategies and yield curve strategies).

Mayoli (2013) examined the effect of financial assets allocation on the performance of commercial banks in Kenya. Cross-sectional and time series were combined between the financial years 2000 to 2012 to establish the relationship between financial asset allocation and profitability of commercial banks in Kenya. The researcher made use of secondary data on financial asset allocation, macro-economic factors and return on assets from 2000-2012. The study concluded that investments in securities offered the highest returns; other factors held constant in the period under review. These securities are perceived to be high risk-high returns assets class. Investments in securities among commercial banks are very low representing less than 1% of asset allocation.

Kiplagat (2014) examined the effect of asset allocation on the financial performance of pension funds in Kenya. The study adopted a descriptive survey and utilized a sample of 40 schemes drawn from a population of 1232 schemes in Kenya. The findings of the study revealed that asset allocation explained 58% of the variability of fund performance, and that 42% was due to other factors such as the manager's selection, timing of investments and securities selection within an asset class, and the management style adopted by the fund managers of the fund. Further, the study established that of all the asset classes permitted by the Retirement Benefits Authority (RBA), investments in Government securities, property, cash deposits and quoted shares was relatively more important in determining the overall performance of the pension funds.

2.5 Conclusion from Literature Review

As revealed in the literature review several researches have explored the concept of asset allocation and capital gains, plus their impact on other concept on a different setting. The modern portfolio theory by Markowitz (1952) is one on the major theories; it explains the concept of asset allocation through mean variance analysis. In addition, several determinants including investment horizon, risk tolerance, available asset classes and, other investor's decisions, also influence investors during asset allocation decisions. As such, there are few studies on capital gains tax on asset allocation in Kenya. This can be attributed to the fact that CGT has been suspended for a good number of years. Existing studies including Leland (1999), Dammon et al. (2003), Dammon et al. (2004) and Desai and Gentry (2003) on capital gains have been carried out on the international scene where capital gains tax has been in operation. In Kenya, most studies are on assets allocation mostly by pension fund, for example, Kinoti (2009), Kagunda (2011), Micheni (2013) and Kiplagat (2014) have all examined the relationship between asset allocation and the financial performance of pension funds in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will focus on the research design, the population of the study, the sample design, data collection procedure and the data analysis procedure.

3.2 Research Design

A research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). This study used a descriptive research design. Orodho (2005) defines a descriptive survey as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. The major purpose of descriptive research is to describe characteristics of objects, people, groups, organizations, or environments. Descriptive research tries to paint a picture of a given situation by addressing who, what, when, where, and how questions. The descriptive approach was also useful for collecting and analyzing numerical data and applying statistical tests.

3.3 Population of the Study

Population refers to an entire group of individuals, events or objects having a common observable characteristic (Mugenda & Mugenda, 2003). The population of the study was obtained from the Kenya Association of Investment groups and consisted of 108 Incorporated

Investment Groups/ Chamas in Nairobi County. Thus, the population of the study comprised of approximately 108 incorporated investment groups in Nairobi County.

3.4 Sample Design

Kothari (2004) defines a sample design as a definite plan determined before any data are actually collected for obtaining a sample from a given population. A sample of 32 was selected for the study. The sample was 30% of the total population as recommended by Gay (1981) that the sample size should be at least 30 percent of the target population to achieve normal distribution. A combination of stratified random sampling and simple random sampling methods were used to select the respondents. Stratified sampling was used to categorize the investment groups onto different strata's based on the type of securities they invest in while simple random sampling was used to select the respondents from each stratum.

3.5 Data Collection

Data for the study was collected using a questionnaire. A questionnaire is a convenient tool in research especially where there are large numbers of subjects to be handled because they facilitate easy and quick derivation of information or responses within a short time (Copper & Schindler, 2003). In addition, Chandran, (2004) posits that questionnaires have the added advantage of being less costly and using less time as instruments of data collection. The questionnaires were self-administered to the sampled respondents.

3.6 Reliability and Validity

Validity is the degree by which the sample of test items represents the content the test is designed to measure while reliability refers to the consistency of measurement and is frequently assessed using the test-retest reliability method (Mugenda & Mugenda, 2003). The instruments validity was ensured by engaging the project supervisor and other experts who were familiar with the study topic. On the other hand, reliability of the instrument was tested using the Cronbach alpha coefficient. A coefficient of 0.7 and above is deemed to be sufficient (Mugenda and Mugenda, 2003).

3.7 Data Analysis

The data collected was analyzed using descriptive and inferential statistics with the help of the Statistical Package for Social Studies (SPSS). Descriptive statistics involved the use of measures of central tendency, which included the mean and standard deviation. Inferential statistical analysis infers properties about a population and this helped in testing hypotheses and deriving estimates.

3.7.1 Analytical Model

To test hypothesis the classical linear regression was used. Regression analysis is a statistical method to deal with the formulation of mathematical model depicting relationship amongst variables which can be used for the purpose of prediction of the values of dependent variable, given the values of the independent variable (Kothari, 2004).The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y = Dependent variable (Asset allocation)

X_1 = Capital gains tax compliance costs

X_2 = Capital gains tax liability

X_3 = Capital gain tax knowledge

β_0 = Intercept (Constant)

β_1 - β_3 = Regression Coefficients

ε = Error term

3.7.2 Test of Significance

At 95% confidence level, the t- test was used to test the statistical significance of the regression coefficients while ANOVA and F – test were used to test the statistical significance of the whole equation.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This chapter presents the descriptive analysis which entails data reliability and summary statistics. In addition the chapter presents the regression analysis and finally an interpretation of the study findings.

4.2 Descriptive Analysis

This section presents the reliability analysis and the summary descriptive statistics. The results obtained are as follows.

4.2.1 Data Reliability

The Cronbach alpha coefficient was used to establish the instruments reliability. Table 4.1 shows the results obtained.

Table 4.1 Cronbach Alpha Coefficient

Variable	Cronbach's Alpha	No. of Items
Asset allocation	.858	6
Capital gains tax compliance costs	.797	6
Capital gains tax liability	.705	6
Capital gains tax knowledge	.837	6

Source: Research Data

According to the results on table 4.1, asset allocation, capital gains tax compliance costs and the capital gains tax liability and capital gains tax knowledge yielded Cronbach alpha coefficients of 0.858, 0.797, 0.705 and 0.837 respectively. As per the results, all the Cronbach alpha coefficients were above 0.7, which thus is an indication that the instrument was reliable.

4.2.2 Summary Statistics

A total of 32 questionnaires were administered to the sampled investment group leaders; all of which were responded to and hence a response rate of 100%. In addition, average responses on each of the study variables by each respondent were computed. Table 4.2 shows the results obtained

Table 4.2 Summary Statistics

	N	Mean	Std. Deviation
Asset allocation	32	3.723	.920
CGT compliance costs	32	3.041	.617
Capital Gains Tax liability	32	3.093	.675
Capital gains tax knowledge	32	3.312	.677

Source: Research Data

The results on table 4.2 shows that the mean response on asset allocation was 3.723 with a standard deviation of 0.920, whereas the mean response on capital gains tax compliance cost was 3.041 with a standard deviation of 0.617 respectively. The results also show that the mean response on capital gains tax liability was 3.093 with a standard deviation of 0.675 while capital

gains tax knowledge had a mean of 3.312 and a standard deviation of 0.677 respectively which indicates that the responses are normally distributed as they fall within the same range.

4.3 Correlation Analysis

Correlation analysis was also undertaken to establish the strength of a linear association between the dependent and the independent variables. Table 4.3 shows the results obtained

Table 4.3 Correlation Matrix

	Asset allocation	CGT compliance costs	Capital Gains Tax liability	Capital gains tax knowledge
Asset allocation	1			
CGT compliance costs	.218	1		
Capital Gains Tax liability	-.252	.658**	1	
Capital gains tax knowledge	.415*	.647**	.461**	1

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research Findings

The results on table 4.3 shows that there is a weak and positive correlation between asset allocation decisions and capital gains tax compliance costs and capital gains tax knowledge. The results also show that there is a weak and negative correlation between capital gains tax liability

and asset allocation decisions by investment groups in Nairobi County. This indicates that there is a weak correlation between the dependent variable (asset allocation) and the other study variables.

4.4 Regression Analysis

The regression model was used to establish the relationship between the dependent variable (Asset allocation) and the independent variables. The results obtained are as follows:-

4.4.1 Model Summary

Table 4.4 shows the model summary which entails the R value, R square, Adjusted R square and the Std. error of the estimate.

Table 4.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 ^a	.477	.421	.7003692

a. Predictors: (Constant), Capital gains tax knowledge, Capital Gains Tax liability, CGT compliance costs

Source: Research Data

According to the results on table 4.4, the R –square value is 0.477 which indicates that 47.7% of variation in the dependent variable is explained by the independent variables while 52.3% of the variation is explained by other factors outside the model and the error term. In addition the value of R is 0.691, which indicates that there is a strong correlation between the dependent and the independent variables.

4.4.2 ANOVA

Table 4.5 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.522	3	4.174	8.509	.000 ^a
	Residual	13.734	28	.491		
	Total	26.256	31			

a. Predictors: (Constant), Capital gains tax knowledge, Capital Gains Tax liability, CGT compliance costs

b. Dependent Variable: Asset allocation

Source: Research Data

The results on table 4.5 indicates that the regression model is significant, since the F statistics value of 8.509 is significant at 5% level of significance and the P value of $0.000 < 0.05$. This indicates that the model is fit, and that there is a significant relationship between capital gains tax and asset allocation decisions of investment groups in Nairobi County.

4.4.3 Regression Coefficients

At 5% level of significance, the regression coefficients were computed to determine whether they are significant or insignificant. Table 4.6 shows the results obtained.

Table 4.6 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.826	.722		3.916	.001
	CGT compliance costs	.542	.315	.364	1.721	.096
	Capital Gains Tax liability	-.993	.248	-.729	-4.011	.000
	Capital gains tax knowledge	.700	.244	.515	2.868	.008

a. Dependent Variable: Asset allocation

Source: Research Data

As per the results on table 4.6 the resultant regression equation was as follows

$$Y = 2.826 + 0.542X_1 - 0.993X_2 + 0.700X_3 + \varepsilon$$

The results on table 4.6 indicate that capital gain tax compliance costs had a positive insignificant relationship with asset allocation decisions of investment groups as indicated by the beta value of 0.542, and a p value of 0.096 > 0.05. The results also established that there is a negative and significant relationship between the capital gains tax liability and asset allocation decisions as indicated by a beta value of -0.993 and a p value of 0.000 < 0.05. In addition, the results established that capital gains tax knowledge had a positive and significant relationship

with asset allocation decisions by investment groups in Nairobi County as indicated by a beta value of 0.700 and a p value of $0.008 < 0.05$.

4.5 Summary and Interpretation of the Findings

This section presents the data analysis, the results and the interpretation of the study findings. As such, 32 questionnaires were administered to the sampled investment group leaders, all of which were responded to, hence a response rate of 100%. In addition, average responses on each of the study variables by each respondent were computed. Reliability analysis revealed that the instrument was reliable since most of the alpha coefficients were more than the recommended value of 0.7. Correlation analysis was also undertaken to establish the strength of a linear association between the dependent and the independent variables, and the study established that there is a weak correlation between the dependent variable (asset allocation) and the other study variables.

The regression model was used to establish the relationship between the dependent variable (Asset allocation) and the independent variables. The study results yielded a coefficient of determination value of 0.477, an indication that 47.7% variation of the dependant variable was explained by the model's variables, while 52.3% was explained by other factors outside the model. The correlation coefficient value was 0.691, which is an indication that there was a strong correlation between the dependent and the independent variables. The model was found to be fit since the p value of $0.000 < 0.05$ hence there was a significant relationship between capital gains tax and asset allocation decisions of investment groups in Nairobi County.

The study findings established that there was a positive and insignificant relationship between capital gain tax compliance costs and asset allocation decisions of investment groups in Nairobi County. This means, a unit increase in tax compliance costs positively influences asset allocation decisions by investment groups in Nairobi. The results also signify that there is a positive relationship between capital gains tax compliance costs and asset allocation decisions by investment group.

The study findings also established that there was a significant negative relationship between capital gains tax liability and asset allocation decisions by investment groups in Nairobi County. This indicates that there is an inverse relationship between the amount of the capital gains tax payable and asset allocation decisions. This indicates that a unit increase in the amount of capital gains tax payable by investment groups inversely affects asset allocation decisions by investment groups. As such, the amount of capital gains tax would discourage investment groups from selling their assets and instead prefer holding them.

Further, the study established that there is a positive and significant relationship between capital gains tax knowledge and asset allocation decisions of investments groups in Nairobi County. This indicates that a unit increase in capital gain tax knowledge by investment groups in Nairobi County would positively influence their asset allocation decisions. These findings are similar to those of Dammon, Spatt and Zhang (2003) who examined the impact of an investor's capital gains tax liability and the existing risk exposure upon the optimal portfolio and rebalancing decisions and established that the investor's incentive to re-diversify the portfolio declines with the size of the capital gain. In addition, the findings also conform to that of Leland (1999) who

examined the optimal trading strategy for an investment fund and established that capital gains taxes lead to lower optimal initial investment levels. Also, in similarity are the findings of Desai and Gentry (2003) who analyzed how corporate capital gains taxes affect the capital gain realization decisions of firms and established that corporate capital gains taxes impact realization behavior significantly.

A study by Gallmeyer et al (2006) also investigated the role of realized capital gain taxation on an investor's consumption-portfolio problem with two risky stocks and a riskless money market and established that an investor's portfolio choice problem is integrally linked to realized capital gain taxation. In addition, Kovenock and Rothschild (1985) also compared to taxation on an accrual basis and established that capital gains tax discourages sales of appreciated assets hence the lock in effect due to the fact that assets subject to capital gains taxation are generally held for a longer time by investors who hold assets, which have increased in value. Additionally, Inanga and Emenuga (1996) also noted that excessive taxation of capital gains from the sale of shares encourages investors to retain their shares and take out their profits in dividends. Further, Hsuku (2008) also investigated the effect of capital gains tax on investors' optimal dynamic consumption and portfolio choice and established that conservative investors will be subject to a negative effect of the capital gain tax liability.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study examined the impact of the new capital gains tax on asset allocation of investment groups in Nairobi County. The study used a sample of 32 registered investment groups and a questionnaire to collect data from the respondents. All the questionnaires were responded to hence 100% response rate. The dependent variable for the study was asset allocation decisions by investment groups while the independent variables included capital gain tax compliance costs, capital gains tax liability and capital gains tax knowledge.

The Cronbach alpha coefficient was used to establish the instrument reliability which yielded alpha coefficients of 0.858, 0.797, 0.705 and 0.837 respectively as per the study objectives. The correlation analysis results established that there was a weak correlation between the dependent variable (asset allocation) and the independent variables. In addition, the regression model generated an R-square value of 0.477, which indicates that 47.7% of variation in the dependent variable is explained by the independent variables while 52.3% of the variation is explained by other factors outside the model and the error term. Further, the regression model was found to be significant at 95% confidence level since the p-value of $0.00 < 0.005$ respectively.

The study findings established that there was a positive insignificant relationship between capital gain tax compliance costs and asset allocation decisions of investment groups in Nairobi County. Additionally, the study findings also established that there was a significant and negative

relationship between capital gains tax liability and asset allocation decisions by investment groups in Nairobi County; Indicating an inverse relationship between capital gains tax liability and asset allocation.

Finally, the study findings also established that there was a positive significant relationship between capital gains tax knowledge and asset allocation decisions of investments groups in Nairobi County.

5.2 Conclusion

The study findings established that capital gain tax compliance costs had a positive and statistically insignificant relationship with asset allocation decisions of investment groups in Nairobi County. Thus, this study concludes that capital gains compliance costs do not influence asset allocation decisions by investment groups in Nairobi County since tax compliance costs are treated as administrative expenses which are incurred in running of the daily activities of the investment groups.

The study findings also established that capital gains tax liability had a negative and statistically significant relationship with asset allocation decisions by investment groups in Nairobi County. Thus, the study concludes that there is an inverse relationship between the amount of capital gain tax payable and asset allocation decisions by investment groups since an increase in CGT liability would reduce the expected returns from the investments which may discourage investors from selling their asset and instead prefer holding them.

The study findings also established that capital gains tax knowledge had a positive and statistically significant relationship with asset allocation decisions and by investment groups in Nairobi County. Thus, the study concludes that knowledge on capital gains taxation positively influences asset allocation decisions by investment groups in Nairobi County.

The findings also established that since the independent variables of Capital Gains tax compliance, Capital Gains tax liability and Capital Gains Tax knowledge, all influence assets allocation in different relationships i.e. both positive and negative. Thus, all independent variables need to be factored in the decision making process to establish their effect on the asset allocation decision of investment groups, as opposed to analyzing each independent variable as stand-alone. This is so, because Capital gains tax compliance and capital gains tax knowledge have a positive impact on asset allocation; whereas Capital gains tax liability has a negative effect on asset allocation of Investment groups in Nairobi County.

5.3 Recommendations for Policy and Practice

This study recommends that investment groups in Kenya should develop and initiate training programs on capital gains tax as this would enable the members to have a wider knowledge on capital gains tax and this which would help them determine the correct portfolio of assets to allocate their funds, plus how to allocate capital among asset classes optimally.

The study also recommends that the Kenya Revenue Authority and the government at large should initiate sensitization programs on capital gains taxation to enlighten investors on the different investments which qualify for capital gain tax. This would also by extension lead to

more compliance by the investment groups when filling their taxes and also, this would lead to a lot more revenue being collected by the revenue authority from Investment groups. This is so since the research finding established that there is a positive and statistically significant relationship between capital gains tax knowledge and the asset allocation decisions by investment groups in Nairobi County.

The study also recommends that investment groups should develop effective policies and guidelines on the asset allocation decisions to ensure that they earn the highest return on their investments; subject to Capital Gains Tax as a constraint. Capital gains tax reduces the eventual expected return on an asset class in the long-term and thus, should be factored in while making key asset allocation decisions that are geared towards meeting the required rate of return for the Investment group.

The study would also recommend that Investment Groups should seek a Tax consultancy to either enlighten the members on the Capital Gains Tax law or the consultants to advise the Investment group on how to manage the Capital Tax liability on various asset classes. This would enable Investment Groups to manage and reduce the expected Capital Tax liability through tax avoidance. Long-term knowledge of how to apply the Capital Gains Tax would also reduce agency costs like hiring Tax consultant. This would also assist the Investment groups in acquiring knowledge on other relevant taxes applicable to them; and how to apply them where relevant.

5.4 Limitations of the Study

This study examined the effect of the new capital gains on asset allocation decisions of Investment groups in Nairobi County. Thus the study findings may not be generalized to other investment groups outside Nairobi County since their investment portfolios vary due to different Geographical locations.

In addition, the study covered only registered investment groups in Nairobi County and the results may not be generalized to unregistered investment groups since some of them may not be complying with CGT requirements due to different annual filing requirements by the law, and access to these groups would be quit challenging.

There was also lack of prior research studies on the topic of the effect of Capital Gains Tax on the asset allocation decision of Investment Groups in general. Most of the previous research has dealt mainly on other financial institutions like pension funds. Thus, there was not enough information to build on during this research.

The study only focused on the influence of Capital Gains Tax, and thus cannot be generalized on other form of Taxation. This is because they are all applied differently and thus require different application when allocating capital among asset classes.

5.5 Suggestion for Further Research

This study focused the effects of the new capital gains on asset allocation of investments groups. Thus this study suggest additional research on the determinants of capital gains tax compliance

by investment groups in Kenya, since this would help highlight the factors that influence CGT compliance by investment groups.

In addition, the study suggests an additional research on the effect of corporate taxes on the optimal allocation of assets by investment groups. This is because apart from the capital gains tax investment groups are also subjected to other forms of taxes which influence their asset allocation decisions.

The study can also be expanded to include unregistered Investment groups and evaluate how Capital Gains tax influences their asset allocation decisions. These groups are quite significant in number and are also part of the revenue collection target base by the Revenue Authority.

The study can also be expanded to other investment groups in other counties, and evaluate how geographical location influences the asset allocation decisions of other investment groups in other counties; subject to Capital Gains Tax influence.

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APPENDICES

Appendix 1: Questionnaire

Dear respondent

I am a student pursuing a Master of Science in Finance Degree at the University of Nairobi carrying out a research on impact of new capital gains tax on asset allocation of investment groups in Nairobi. You and other respondents have been selected to take part in this research and any information given will be treated with utmost confidence and shall only be used for academic purposes. Your support will be highly appreciated.

Please **tick** or **fill** where appropriate

Section 1: Background Information

1. Indicate the name of your Investment group.....

2. Indicate the number of years the investment group has been in operation

Less than 1 year [] 2- 3 years []
4-5 years [] Over 6 years []

3. Indicate the number of group members in your investment group

.....

4. Does your investment group pay all the respective taxes?

Yes [] No [] No idea []

Section 2: Asset Allocation

5. Indicate the assets in which your group invests in

Shares [] Bonds []
Money Markets [] Real property []

6. Evaluate the following statements on asset allocation. Use the following scale as appropriate

1- Strongly disagree 2- Disagree 3 – Neutral 4 - Agree 5 – Strongly agree

Statement	1	2	3	4	5
Asset allocation decision is a key determinant of an investment group portfolio performance					
Asset allocation maximizes returns and minimizes the risk of an investment					
Good asset allocation plan helps investment groups reach their financial objectives					
Poor asset allocation decisions can cause the returns of the average investment to lag in the respective markets.					
Proper asset allocation plan provides a long-term framework to structure a portfolio					

Section 3: Capital Gains Tax compliance Costs

7. Indicate some of the costs your investment group incurs complying with capital gain tax

Tax consultancy [] Capital gains tax audit cost [] Fines and penalties []

Others.....

8. Evaluate the following statements on the cost of capital gains tax on asset allocation. Use the following scale as appropriate

1- Strongly disagree 2- Disagree 3 – Neutral 4 - Agree 5 – Strongly agree

Statement	1	2	3	4	5
The capital gains tax compliance costs reduces the expected					

returns, which may discourage asset allocation decisions by investment groups					
Capital gains tax compliance costs discourages investment groups from selling their investments					
Sometimes capital gains tax compliance costs exceed the payable tax by investment groups					
Capital gains tax compliance costs vary depending on the type of investment					
Capital gains tax compliance costs leads to high transactions costs hence affecting assets allocation					

Section 4: Capital Gains Tax Liability

9. Does the amount of capital gains tax payable affect your investment group asset allocation decisions?

Yes [] No [] No idea []

10. Evaluate the following statements on capital gains liability on asset allocation. Use the following scale as appropriate

1- Strongly disagree 2- Disagree 3 – Neutral 4 - Agree 5 – Strongly agree

Statement	1	2	3	4	5
The amount of capital gains tax payable influences asset allocation decisions by investment groups					
Capital gains tax rate discourages saving, investment and entrepreneurship by investment groups.					
Capital gains play a huge role in determining how much of a portfolio an investment group gets to keep					

The amount of capital gains on sale of shares determines whether investment groups will retain their shares or take in dividends					
Capital gains tax liability gives raise to double tax hence imposes a high burden on investment groups.					

Section 5: Capital Gain Tax Knowledge

11. Does your invest group members have adequate knowledge on capital gains tax

Yes [] No [] No idea []

12. Evaluate the following statements on the capital gains tax knowledge on asset allocation. Use the following scale as appropriate

1- Strongly disagree 2- Disagree 3 – Neutral 4 - Agree 5 – Strongly agree

Statement	1	2	3	4	5
Effective capital gains tax education can change the attitude and perception of investment groups					
Most investment groups member have poor knowledge regarding capital gains tax laws guiding					
The level of knowledge on capital gain tax influences investment groups compliance with capital gains tax					
Investment groups have more challenges with capital gains tax compared to other types of taxes.					
Investment groups have not been able to access information on the new capital gains tax					

Thank you for your time and cooperation

Appendix II: Data used in Regression

(Averages of the responses from the 32 respondents on the variables)

No.	Asset allocation	CGT compliance costs	CGT liability	CGT knowledge
1	4.17	3.33	3.00	3.83
2	4.17	3.67	3.67	3.67
3	3.33	2.83	2.33	2.50
4	4.00	3.17	3.83	3.83
5	3.33	3.83	3.50	3.67
6	2.00	2.67	2.67	3.33
7	4.00	4.00	3.50	3.67
8	1.33	2.50	3.67	1.67
9	4.67	3.00	2.50	3.83
10	4.67	1.83	1.33	2.83
11	4.33	3.00	2.50	3.83
12	4.00	2.83	2.83	3.50
13	4.67	3.50	3.00	3.50
14	3.17	2.50	3.00	2.67
15	3.67	3.83	3.67	3.33
16	3.83	3.33	3.33	3.50
17	4.17	1.83	2.33	2.50
18	4.00	3.67	3.83	4.33
19	4.50	2.83	3.17	3.50

20	1.67	2.50	3.67	2.00
21	2.83	2.67	3.33	3.83
22	4.17	3.17	3.17	3.00
23	4.50	3.67	3.17	3.00
24	4.33	2.83	3.00	3.67
25	4.17	2.17	1.00	1.67
26	4.17	2.17	3.00	3.00
27	1.83	2.83	3.33	3.33
28	4.33	2.83	3.33	3.67
29	4.00	3.17	3.17	3.67
30	4.50	4.00	3.67	4.00
31	2.67	3.00	3.33	3.33
32	4.00	4.17	4.17	4.33

Source: Research Data