EFFECT OF INVESTMENT INCENTIVES ON STOCK MARKET PERFORMANCE: SURVEY OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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Effect of Investment Incentives in the Performance of Listed Firms in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university:

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DEDICATION

This thesis is dedicated to my loving parents Daniel Ondabu Nyakundi and Prisca Ondabu and also unto my brothers and sisters (Frank, Christine, Wilson, Betty and Conrad). I cannot remember when you were not by my side.

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LIST OF ABBREVIATIONS

ARCH: Autoregressive Conditional Heteroscedasticity

ASEA: African Securities Exchange Association

BEA: Bureau of Economic Analysis

CBK: Central Bank of Kenya

CIT: Corporate Income Tax

CMA: Capital Markets Authority

CPA: Cost and Price Analysis

CSX: Cayman Islands Stock Exchange

EMH: Efficient Market Hypothesis

FDI: Foreign Direct Investment

FII: Foreign Indian Investors

GARCH: Generalized Autoregressive Conditional Heteroscedasticity

GI: Growth Incentives

IFC: International Finance Corporation

IOSCO: International Organization of Securities Commision

IP: Investors' Perceptions

IPO: Initial Public Offer

KRA: Kenya Revenue Authority

LI: Liquidity Incentives

MAI: Multilateral Agreement on Investment

MC: Market Capitalization

MTR: Market Turnover Ratio

METR: Marginal Effective Tax Rate

NASDAQ: National Association of Securities Dealers Automated Quotation

NASI: Nairobi all share Index

NSE: Nairobi Securities Exchange

NYSE:	New York Stock Exchange
OECD:	Organization of Economic Cooperation and Development
PSE:	Palestine Stock Exchange
RR:	Retention Rate
SDC:	Securities Data Company
SGE:	Self-Interest Guarantee Funds
SMI:	Stock Market Index
SP:	Stock Market Performance
SPI:	Stock Market Index
SPERTEL:	Social Political, Economical, Regulatory, Technological, Environmental and Legal
TI:	Tax Incentives
VI:	Visibility Incentives
VIF:	Variance Inflation Factor

DEFINITION OF KEY TERMS

Affect Heuristics: Explains individual behaviours when it comes to risk assessments (Finucane, Alhakami, Slovic & Johnson, 2000).

Cognition: Cognitive focuses on the way humans process information, looking at how we treat information that comes in to the person and how this treatment leads to responses. In other words, they are interested in the variables that mediate between stimulus/input and response/output (Kahneman & Tversky,1979)

Growth Incentives: Growth incentives are the advantages provided to companies that go public such as equity financing opportunities to grow businesses through expansion of operations to acquisitions (Levine, 1996).

Investment incentives: Measurable economic advantages provided to specific enterprises or groups of enterprises, with the goal of steering investment into favored sectors or regions or of influencing the character of such investments (Ahn & Cheng, 1999).

Liquidity Incentives: Liquidity Incentives are the equity financing opportunities and diversification opportunities provided for investors by the NSE. Mutua (2011) asserts that, companies listed at Nairobi Securities Exchange can access long-term capital from a wide range of local and international investors.

Perceptions: Heuristics investors form about the nature of investment they want to Pursue which may not be related to the fundamental analysis of the market itself (Kukreja, 2012).

Stock Market Performance: Actual results of the stock market as measured by the market capitalization, stock market index and market turnover (Githaiga, 2013).

Tax Incentives: Tax incentives are the tax reductions and tax exemptions provided to investors' in order to motivate them to list at NSE (CMA, 2005).

Visibility Incentives: Stock market visibility incentives are the media coverage, publicly filed documents and industry stories, all of which translate to better image and high visibility of listed firms as opposed to unlisted firms (Levine, 1996).

ABSTRACT

Stock market investment incentives were introduced with the aim of burgeoning stock market performance through intensified listing at the Nairobi Securities Exchange (NSE). It has been observed that NSE's performance has not improved despite those investment incentives. It is not clear whether stock market incentives promote stock market performance or not. The study objectives were to determine the effect of tax incentives, liquidity incentives, growth incentives and visibility incentives on stock market performance in Kenya and to investigate the moderating effect of investors' perception on the relationship between stock market incentives and performance for firms listed at NSE. This study adopted a descriptive research design with a study population of 60 listed firms at NSE. A sample of 30 listed firms were selected through stratified and systematic random sampling techniques out of which 150 respondents were selected to form the actual sample size for the study. The study used both primary and secondary data sources in gathering data for analysis. Data collection involved self-administration of questionnaires. The K-density curve on normality test revealed that the data was normally distributed with the variables assumed to be univariate normal since the skewness statistic was 0.07 which is within the interval (-3.0, 3.0) and the kurtosis statistic was -1.06 lying in the interval (-10.0, 10.0). The average Cronbach's apha value was 0.73025 indicating that the data collection instruments were reliable. The Hausman test's chi square statistic value was 3.2267 with Chi square df of 3 and probability of 0.26543 which indicates that the prefered model was the random effects model as opposed to the fixed effects model. Autocorrelation test results were all within $1.5<d<2.5$ which symbolized the absence of both negative and positive serial correlation. The VIF values for multicollinearity test ranged between 1.002 and 1.265 which indicated the absence of multicollinearity problems since all the values were below the range of between 5 and 10 which could be considered as potentially problematic. The findings from this study reveal that liquidity incentives and visibility incentives affects NSE performance. Tax incentives and growth incentives were found to have an insignificant effect on NSE performance. Investors' Perceptions were found to have a strong moderating effect on all incentives. It is recommended that the governments should put in place predictable, clear tax laws and transparent tax administration that would provide conducive and favorable market opportunities to the investors.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This study sought to understand the effect of Investment incentives on stock market Perfomance at NSE. Investors' perception comes in as a moderating variable to influence the extent to which the relationship holds. It is expected that if incentives are provided, the performance of NSE would improve. Also, it is expected that whenever those incentives are not provided, investors will not be motivated to make listing decisions at NSE and hence the NSE perfomance would decline. This expectation is vouched by Ajmi (2008)'s study findings that Incentives especially fiscal incentives have been associated with higher investments in several countries, including Ireland, Mauritius, and Singapore. It is an expectation therefore, that the same should be replicated in the context of Kenya.

1.1.1 Investment Incentives and Performance of Stock Market

An incentive is something that motivates an individual to perform an action. Investment incentives are defined as measurable economic advantages that governments provide to specific enterprises or groups of enterprises, with the goal of steering investment into favored sectors or regions or of influencing the character of such investments (Ahn & Cheng, 1999).

Incentives especially fiscal incentives have been associated with higher investment in several countries, including Ireland, Mauritius, and Singapore. But while some governments vouch for the effectiveness of incentives, many of those incentives have failed to attract expected investments (Ajmi, 2008).

The rationale behind granting of incentives is to exploit investments opportunities, where system is seen as an obstacle. They are also used to improve social welfare of the community for example, granting incentives related to health, education or savings for future use. On the other hand they can also be used to discourage certain

activities like overproduction of agricultural produce resulting to instability in prices (Klemm, 2009).

Wickham (2003) argues that liquidity incentives provided at the stock markets are meant to promote investments through increased listing. Wickham (2003) further asserts that, company stock traded on the major exchanges can usually be considered liquid. Often, approximately 1% of the float changes hands daily, indicating a high degree of interest in the stock. On the other hand, company stocks traded on the pink sheets or over the counter are often illiquid, with very few, even zero, shares traded daily.

A number of countries have created actual tax incentives in the taxation of their listed companies.Vietnam applied in 2004-2006 a 50% reduction on the normal Corporate Income Tax (CIT) rate (at that time 28%). The effective tax rate of a listed company was thus 14%. This scheme was introduced when the Stock Exchange was set up, but not continued. In case a listed company also had a reduced tax rate or tax holiday because of its investment project, the 50% reduction would only apply after the other tax holiday (Pagano, 1996).

Thailand on the other hand applies lower CIT rates for companies that are listed on Thailand's SET (25%) or the MAI (20%). The normal Thai CIT rate is 30%, but lower rates exist for profits below a certain threshold. The reduced rate for the listed companies applies only for a period of 3 years, not beyond. In addition, Thailand provides in an investment tax credit up to 25% of the total qualifying cost of new projects of listed companies (machinery, vehicles, equipment and software).

Stock market investment incentives in Kenya were propelled by the need to encourage more investors at the Nairobi Stock Exchange through increased listing which would end up promoting NSE performance. Tax incentives, liquidity incentives, growth incentives and visibility incentives were provided to achieve this purpose. CMA (2005) for instance introduced reduced tax rates of 20% as opposed to the normal 30% for a period of 5 years, provided these companies offered at least 40% of their shares to the Kenyan public, foreign investors were given an

opportunity to acquire shares freely at NSE subject to a minimum reserved ratio of 25% for domestic investors in each listed company (CMA, 2002), Investment ceiling by retirement benefits schemes in fixed income securities (e.g. bonds and commercial papers) was raised from 15% to 30% (CMA, 2002), collective investment schemes set up by employers on behalf of employees to invest in listed shares were exempted from income tax (CMA, 2002).

Starting 1st January 2003, newly listed companies were mandated to pay a lower corporation tax of 25% for a period of 5 years following their listing of at least 30% of shares to the public (CMA, 2002), transfers of assets involved in the issuance of asset-backed securities was exempt from stamp duty (CMA, 2000/2001), newly listed companies were mandated to pay a lower corporation tax of 27% for a period of three years if they listed at least 20% of the share capital to the public (CMA, 2001).

In order to encourage the transfer of technology and skills, foreign investors were allowed to acquire up to 49% of local brokerage firms; and up to 70% of local fund management companies (CMA, 1999), investments by Insurance companies on listed securities were exempted from tax arising out of capital gains on sale of shares (CMA, 1996/97), costs of IPOs were made tax deductible (CMA, 1995), liquidity incentives were made possible to facilitate transactions and to ensure investors readily got in and out of the stock markets at will (CMA, 2000), growth incentives were provided through IPOs which gave an opportunity for listed companies to raise more capital for them to meet both short term and long term goals (CMA, 2000) as well as visibility incentives which were mainly provided through public disclosures, media coverage, publicly filed documents and industry stories to gain more marketable and also gain more investors' confidence (CMA, 2000).

CMA (2006) exempted from income tax interest income accruing from all listed bonds with at least a maturity period of three years. The unclaimed dividends outstanding in listed companies for more than seven years were paid to Investor Compensation Fund (CMA, 2006). To promote listings at the NSE, CMA proposed to extend the deduction of expenditure of a capital nature incurred by a company on

legal costs, and other incidental expenses while being processed for listing without raising additional capital (CMA, 2006). As an incentive to encourage more investors at the Nairobi Stock Exchange, CMA proposed that newly listed companies pay corporation tax at a lower rate of 20%, for a period of 5 years, provided these companies offer at least 40% of their shares to the Kenyan public (CMA, 2006).

From among the many incentives provided at NSE, the researcher examined tax incentives (tax reductions and exemptions), liquidity incentives (equity financing and diversification opportunities), growth incentives (stock equity access and total assets growth opportunities) and visibility incentives (media coverage, publicly filed documents and industry stories). The researcher anticipates a positive relationship between incentives and performance in such a way that whenever incentives are provided at NSE, that would promote the performance of firms listed at NSE.

1.1.2 Incentives and Performance of Firms Listed at NSE

Githaiga (2013) define stock market performance as the actual results of the stock market as measured by the market capitalization, stock market index and market turnover. In the Arab Republic of Egypt, the Capital Markets Authority continued to implement new initiatives to increase investor protection, reduce risks and increase market stability during 2000. These measures include the creation of the Settlement Guarantee Funds (SGF) and the introduction of professional liability insurance for companies in the security industry aimed at promoting stock market performance (CMA, 2000).

Ideally, the policy maker will want to verify if it is necessary to grant incentives to an investor, or if the investor would also carry out the investment without such incentives. From a perspective of fiscal revenue, granting incentives to listed companies that would also list without such incentives actually simply constitutes windfall profits for the shareholders.

Fiscal policy incentives have been used in many countries like Kenya and Tanzania. For example, in Kenya, the rate of corporation tax for newly listed companies on the

Nairobi stock exchange was reduced from 30% to 25% over a five-year period starting 1st January 2002 (CMA, 2001). There are exemptions from withholding tax on interest and dividends on collective investment schemes for employees and the limit on tax-free contributions to registered retirement benefit scheme was removed. In Tanzania, withholding tax on interest earned on long term debt securities listed in the Dar-es-Salaam stock exchange during the 2002/2003 fiscal years was abolished.

The NSE continues to innovate, transform and adapt to fulfil the needs of its stakeholders and to live up to their own mission of providing a world class securities trading facility. The long-term objective of NSE is to positionKenya as the financial services hub of the East African Region. The 2012 performance of the NSE was commendable. The NSE 20 Share Index ended 2012 at 4,133.02 points and has been on an upward trend since crossing the 4,000 mark on October 15 2012. For 2012, the NSE 20 Share Index was up 28.64%, Market capitalization rose 46.5% to Kshs.1.27 trillion ($14.53 billion) (Asea, 2013).

Asea (2013) reveals that, in 2012, the Government of Kenya raised Kshs.115.4 billion ($1.32 billion) through the issuance and listing of Government of Kenya Treasury Bonds with maturities ranging from one – twenty years. Corporate debt issues amounted to Kshs.6.97 billion ($79.73 million); rights issues raised an aggregate amount of Kshs.27.06 billion ($309.54 million) and introductions increased market capitalization by Kshs.22.46 billion ($256.92 million). 2012 also saw the first inward cross listing of an East African company on the NSE since the incorporation of the East African Securities Exchanges Association (EASEA) on May 15 2009, when Umeme Holdings Ltd., cross listed on the Main Investment Market Segment of the NSE on December 14, 2012. In 2012 capital markets transactions were valued at Kshs.171.89 billion ($1.97 billion).This is a great testimony on the growth incentives provided at NSE and how they have helped listed firms to raise more capital for their growth.

1.2 Statement of the Problem

There has been controversy on whether stock market investment incentives provided at NSE affect NSE performance, and if they do, what could be the nature of such effect. KRA (2009) reported out through an estimate that about Kshs 220.8 billion was lost between the years 2003-2009 towards granting of investment incentives whose results remain grey. CMA (2016) reports that the Nairobi Securities Exchange 20 Share Index which is a major stock market index used to track the performance of 20 best performing companies listed on the Nairobi Securities Exchange decreased 21.5 points or 0.62% to 3462.60 between 2010 and 2016 despite the existence of investment incentives, and it raises questions on the effect of such investment incentives on stock market performance; whether the effect is positive, negative or null. According to Ahn and Chuang (1999), it is expected that whenever incentives are provided, that should promote stock market performance positively.

Gale (1996) finds out from a survey of investors and government departments entrusted with encouraging investment that the governments believed incentives strongly influenced investment decisions. For investors however, Gale (1996) found that: access to domestic markets, a good investment climate, security and stability, skilled labor, and other factors ranked much higher than incentives. Vanderbruggen (2002)'s study findings revealed that although incentives will always be taken into account by investors, these are rarely among the most important factors when an investment decision is made (Vanderbruggen, 2002).

Githaiga (2013) observed that NSE's Performance increased even when tax incentives were reduced and sometimes decreased even when tac incentives were increased. The researcher concluded that there is no direct notable relationship between stock market incentives and stock market performance. If this is the case, then the relevance of continued provision of stock market incentives at NSE becomes a fallacy. Conspicuously, there has been continued provision of stock market investment incentives even when the results of such provision have not yielded any

visible fruits. It matters that whenever incentives are given and those incentives are not improving performance, then that amounts to wastage of public resources.

The area of stock market investment incentives and how they promote stock market performance has not been conclusively studied. While some researchers argue that incentives result in a positive increase in stock market performance (IOSCO, 2012), others tend to argue that incentives do not influence stock market performance at all (Aregbeyen & Mbadiugha, 2011). Researchers have not affirmed in stating the actual effect of investment incentives on stock market performance. It is due to the need to uncover and clarify these continued dichotomies that the researcher conducted this study to determine the effect of investment incentives on stock market performance of firms listed at the Nairobi Securities Exchange.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to investigate the effect of investment incentives on stock market performance of firms listed at the Nairobi Securities Exchange

1.3.2 Specific Objectives

1. To determine the effect of tax incentives on stock market performance of firms listed at the Nairobi Securities Exchange
2. To establish the effect of liquidity incentives on stock market performance of firms listed at the Nairobi Securities Exchange
3. To find out the effect of growth incentives on stock market performance of firms listed at the Nairobi Securities Exchange
4. To assess the effect of visibility incentives on stock market performance of firms listed at the Nairobi Securities Exchange

5. To evaluate the moderating effect of investors' perceptions on the effect of investment incentives on stock market performance of firms listed at the Nairobi Securities Exchange

1.4 Research Hypotheses

1. H_{01}: Tax Incentives do not have any effect on stock market performance of firms listed at the Nairobi Securities Exchange.
2. H_{02}: Liquidity Incentives do not have any effect on stock market performance of firms listed at the Nairobi Securities Exchange.
3. H_{03}: Growth Incentives do not have any effect on stock market performance of firms listed at the Nairobi Securities Exchange.
4. H_{04}: Visibility Incentives do not have any effect on stock market performance of firms listed at the Nairobi Securities Exchange.
5. $H_{05:}$ Investors' Perceptions does not moderate the effect of investment incentives on stock market performance of firms listed at the Nairobi Securities Exchange.

1.5 Significance of the Study

Government and policy makers are the vital beneficiaries of this study. The results of the study forms a basis for them to decide whether to continue the provision of stock market investment incentives as a way of encouraging investments, or on whether incentives are a loss and misuse of public resources.

This study helps investment brokers to know the exact factors that current and potential investors take into consideration before making an investment decision. Academicians and researchers who aspire to be producers of ideas and not only consumers of knowledge find this study very useful in providing them with empirical literature which is vital for developing their researches both in sub-Saharan Africa and the rest of the world.

Investors, governments, academicians and scholars are vital beneficiaries of this research findings as they play an important role as a source of knowledge for them to understand and appreciate. This study enriches the theory and practice of finance in helping scholars realize the gift-motivator relationships between investment incentives and stock market performance in cases where perceptions are inherent.

1.6 Scope of the Study

This study was confined to the focus of Nairobi Securities Exchange, the only stock market which is currently trading in Kenya. The study was further confined to the study of the effect of investment incentives on stock market performance of firms listed at the Nairobi Securities Exchange. The management of the 60 firms listed at NSE formed part of the study population out of which 30 firms were sampled via stratified random sampling and firms picked via systematic random sampling technique as attached in appendix II, thereby inhibiting the larger conceptual configuration of the stock market which is made up of stock brokers, individual and corporate investors, specialists, regulators in addition to the listed firms. The study was further confined to the study of four investment incentives provided at NSE namely: tax incentives, liquidity incentives, growth incentives and visibility incentives.

1.7 Limitations of the Study

This research was limited in terms of scope, it covered only the study context of Nairobi Securities Exchange, a stock market operating within Kenya. Stock markets of different developing countries might be unique in their kind thereby leading to invalidated generalization. This findings were thus generalized to the local context of developing nations only. The study was limited to the survey of listed firms at NSE, a study of the entire stock market of Kenya including brokers, dealers and specialists might generate different results simply because stock market brokers, dealers and specialists are likely to have inside information on the factors likely to affect the stock market performance than those possessed by the management staff of the firms listed at NSE. The study was biased of potential reliability problems as a

measurement of consistency of the data collection instruments. To overcome this limitation, the study tested for reliability through the usage of Cronbach's alpha test whose findings revealed that the data collection instruments were reliable as the average Cronbach's apha value was 0.73025 which exceeds 0.7 as per the minimax rule (Cronbach, 1951).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter entails a preamble on the theoretical framework, empirical literature, knowledge gaps and chapter summary. Section 2.2 focuses on the theoretical framework where it ground breaks four theories used in this study: Efficient Market Hypothesis theory, Agency theory and the prospect theory. Section 2.3 illustrates the conceptual framework, section 2.4 describes the empirical literature, section 2.5 provides a critique of literature and finally section 2.6 crowns the chapter with a chapter summary.

2.2 Theoretical Framework

This section explains the relevant theories which have been advanced to explain the relationship between investment incentives, investors' perceptions and the stock market performance. This area explores four main theories namely: Efficient Market Hypothesis theory, Agency theory and the prospect theory. Agency theory formed the anchoring emphasis of this study.

2.2.1 Efficient Market Hypothesis

Efficient Market Hypothesis (EMH) was advanced by Fama (1970). The theory states that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

Firstly, the theory assumes that the market is efficient. Secondly, it is assumed that a large number of investors analyze and value securities for profit. Thirdly, new information comes to the market independent from other news and in a random fashion. Fourtly, stock prices adjust quickly to new information and finally, stock prices should reflect all available information. The Crux of the EMH is that it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher return in purchasing riskier investments (Harvey, 1991).

This theory is relevant to this study because of its ability to explain the relationship between efficiency and share prices which portrays stock market performance. However, the theory suffers from joint hypothesis problem which says that it is never possible to test (sufficiently, to prove or disprove) market efficiency. A test of market efficiency must include some model for how prices may be set efficiently. Then actual prices can be examined to see whether this holds true. The joint hypothesis problem says that, when this happens, it shows that the model is not complete. There are some factors that are not accounted for. Going further, such factors must have a rational basis, because that is the assumption. No one needs to explain what these factors might be (in fact, which is dangerous because it can be proved wrong), just that they may exist, or no one can prove that they don't.

2.2.2 The Agency Theory

The 1976 article, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' by Jensen and Meckling helped establish agency theory (Lan *et al.* 2010). The adoption of the agency logic increased during the 1980's as companies started replacing the hitherto corporate logic of managerial capitalism with the perception of managers as agents of the shareholders (Zajac *et al.,* 2004). The subsequent stream of literature would break with the tradition of largely treating the firm as a black box and the assumption that the firm always sought to maximize value (Jensen, 1994).

Out of the agency logic grew two closely related streams of research; the mathematically complex Principal-Agent literature and the more practice oriented Positive Agency Theory (Shapiro, 2005). Common to both is shareholder primacy, wherein the principal is positioned both as the residual claimant and main stakeholder.

As any theory, Agency theory is based in a number of assumptions about man, which have a significant impact on the formation of the theory (Davis *et al.,* 1997). The most common belief is the basis on the economic model of man (Shapiro, 2005). Jensen and Meckling (1976) denounce this interpretation however, by arguing that the theory is grounded in what they call REMM – the Resourceful, Evaluative, Maximizing Model (Jensen *et al.,* 1994). They argue that the REMM most closely replicates human action, and that the economic model of man is a simplified version that does not reflect the spectrum of human behavior.

Opportunism is therefore central to this view of man, where an actor‘s promise to do a certain action is worthless if the circumstances of the promised action changes before the action is carried out (Heath, 2009). As such, changes in behavior are also driven by changes in incentives (Prendergast, 1999).

With the understanding that man is self-interested, ever opportunistic and driven by incentives, agency theory addresses the effect of investment incentives on the performance of firms listed at NSE. It is expected that the capital markets authority of Kenya which is the regulator of NSE acts as an agent of the principal who is the government of Kenya in provision of stock market incentives aimed at promoting stock market performance. It is however expected that a potential conflict of interest can emerge if the CMA which plays this role does not meet the requirement of investor motivation of increasing listing and even lure new investors toward listing their firms at NSE so as to promote NSE performance. Following the relevance of this theory in understanding the principal and agent relationships, this theory forms the anchoring basis for this research.

2.2.3 Prospect Theory

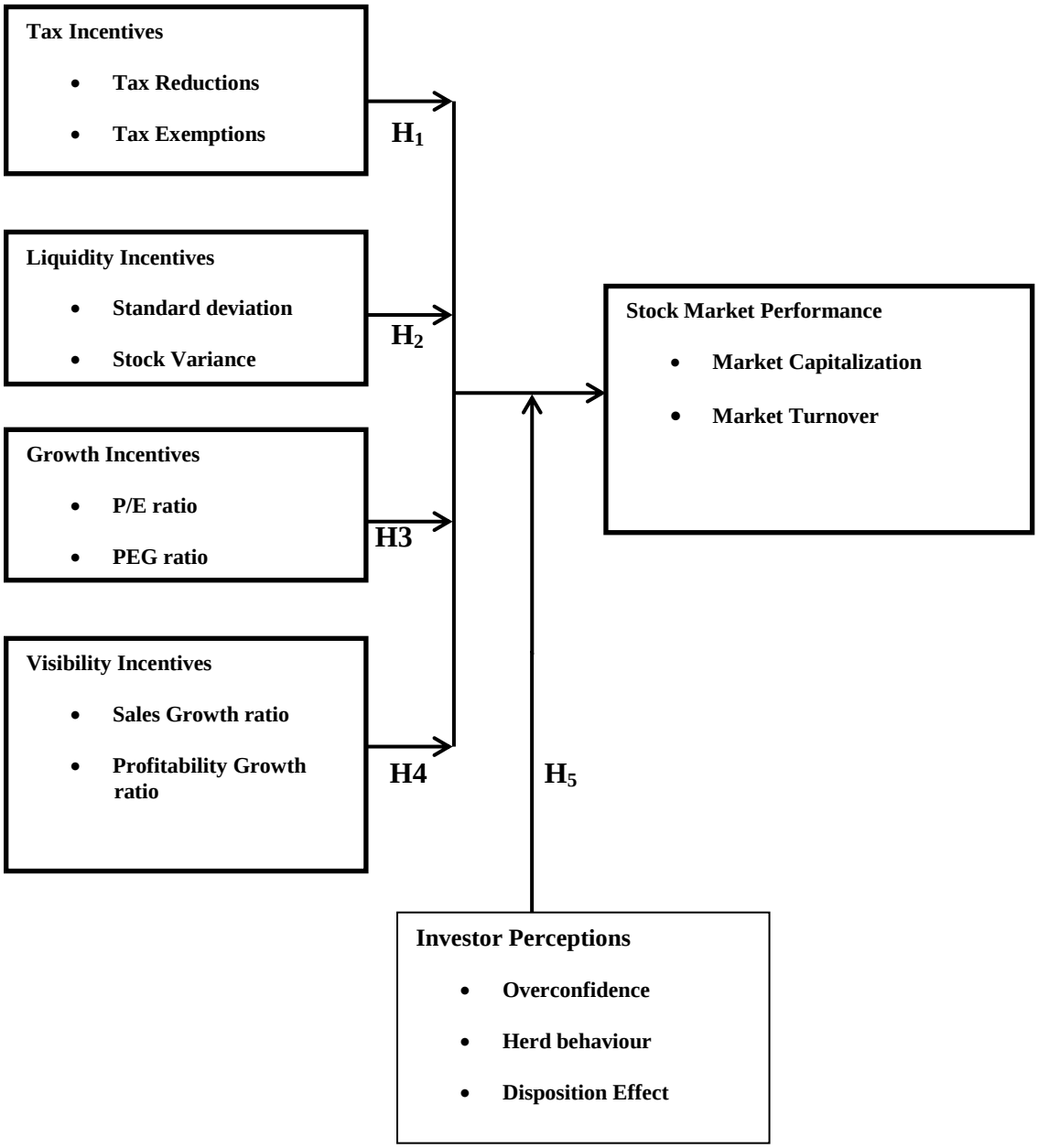
Prospect theory is a behavioral economic theory that describes the way people choose between probabilistic alternatives that involve risk, where the probabilities of outcomes are known. The theory states that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics (Kahneman & Tversky, 1972).

Kahneman and Tversky (1979) describe the decision processes in two stages: editing and evaluation. During editing, outcomes of a decision are ordered according to a certain heuristic. In particular, people decide which outcomes they consider equivalent, set a reference point and then consider lesser outcomes as losses and greater ones as gains. The editing phase aims to alleviate any framing effects.

It also aims to resolve isolation effects stemming from individuals' propensity to often isolate consecutive probabilities instead of treating them together. In the subsequent evaluation phase, people behave as if they would compute a value (utility), based on the potential outcomes and their respective probabilities, and then choose the alternative having a higher utility (Kahneman & Tversky, 1972)

This model is descriptive: it tries to model real-life choices, rather than optimal decisions and hence because of its focus on the real world. Prospect theory has been applied to a diverse range of situations which appear inconsistent with standard economic rationality such as the equity premium puzzle, the excess returns puzzle and the various gambling and betting puzzles, intertemporal consumption, and the endowment effect. It is seen as the ideal theory in explaining the real world behaviours of investors as opposed to the ideal world which is always hypothethical.

2.3 Conceptual Framework



Independent variables **Moderating variable** **Dependent variable**

Figure 2.1: Conceptual Framework

2.4 Empirical Literature Review

This section discusses empirical literature that has been advanced to explain the relationship between investment incentives, investors' perceptions and the stock market performance. The empirical literature is reviewed according to the study objectives to document the immediately available knowledge pertaining to the study variables before the onset of this research.

2.4.1 Tax Incentives and Stock Market Perfomance

Tax reductions and tax exemptions are the main tax incentives provided to investors' in order to motivate them to list at NSE. A company that lists its shares at the Nairobi Stock Exchange benefits from incentive tax rates as follows: where a company has 20% of its issued shares listed corporation tax is levied at 27% for the first 3 years; where a company has 30% of its issued shares listed corporation tax is levied at 25% for the first 5 years and where a company has 40% of its issued shares listed corporation tax is levied at 20% for the first 5 years (CMA, 2005).

Registered venture capital funds have been accorded major tax incentives including tax holidays of up to ten years on the funds income (CMA, 1997/98). There has been reduction of withholding tax applicable to dividend income arising from investment on listed securities for both local and foreign investors; the foreign rate has been fixed as 10% while the local rates have moved from 10% to7.5% to 5%. (CMA, 1997). Stamp duty and value added tax on the transfer of listed securities were exempted (CMA, 1995), Costs of IPOs were made tax deductible (CMA, 1995) and the 7.5 % Capital Gains Tax introduced in 1975 were suspended (CMA, 1985).

Hassett and Hubbard (2002) provide a good review of the literature on the effectiveness of tax policy, in general, and tax incentives, in particular, in promoting investments. They find that tax policy affects investment with a 1.0 percent increase in the user cost of capital lowering investment by 0.5–1.0 percent (for an elasticity of –0.5 to –1.0). This analysis is based on microeconomic data from firms. Macroeconomic data, by contrast, provide little evidence that tax policy affects

investment. But this conclusion is likely due to measurement errors in macroeconomic data, inter-asset reallocation of capital, and simultaneity, which make it difficult to draw causal links or make correct attributions using macroeconomic data. Taxes increase the user cost of capital, so any uniform reduction in that cost should encourage capital investment. But targeted incentives areunlikely to broadly reduce the cost of capital.

Though Hasset and Hubbard (2002) find that tax policy has little effect on investment when macroeconomic data are used, there is evidence that taxes affect the volume and location of Foreign Direct Investment. Extensive research indicates that FDI is sensitive to taxation in host countries (Hines, 1997).

Grubert and Mutti (2000) used data from the Bureau of Economic Analysis (BEA) to study why investors decide to locate in certain countries. The researchers studied FDI in 47 countries including developing countries. They find that investments oriented toward domestic markets were less sensitive to changes in tax incentives, while export-oriented investments were more sensitive. Also using BEA data, Desai, Foley and Hines (2006) concluded that U.S.-based multinational corporations in countries with a 10 percent higher indirect tax rate had 7.1 percent less assets (physical investments). Moreover, in countries with a 10 percent higher corporate income tax rates, such corporations have 6.6 percent less assets. This study found significance in that more than half of the 55 countries with inbound investments were developing countries.

There is a significant vacuum in the literature on econometric studies regarding the efficacy of investment incentives in developing countries (Grubert & Murt, 2000). Although the literature concludes that tax rates matter a lot for FDI, this conclusion cannot be extended to non-OECD countries (Desai, Foley & Hines).

To address this shortcoming in the literature, the World Bank Group's Investment Climate Advisory Services undertook a series of econometric studies to determine how taxation affects FDI in developing countries. Investor surveys were also conducted to provide richer, disaggregated data. In addition, the International

Monetary Fund (IMF) conducted a study on how corporate tax rates and tax incentives affected FDI in 40 Latin American, Caribbean, and African countries during 1985–2004 (OECD, 2002). The studies had findings similar to those of the OECD studies: FDI was affected by tax rates, with a 10 percentage point increase in the corporate income tax rate lowering FDI by 0.45 percentage point of GDP. The studies also found that extending tax holidays by 10 years increased FDI by 1 percentage point of GDP. Still, these numbers were small relative to those for OECD countries. Based on such experiences, the OECD concluded that a low tax burden cannot compensate for a generally weak or unattractive FDI environment (OECD, 2002)

Rolfe and White (1991) found that tax holidays had a small effect on FDI, tax holidays and import duty exemptions were unlikely to attract FDI if non-tax factors were favorable. Morisset and Pirnia (2001) neither support this conclusion, stating, that incentives will generally neither make up for serious deficiencies in the investment environment nor generate the desired externalities. The Investment Climate Advisory pursued this line of research to show the econometric evidence behind it. The average response was much more pronounced in countries with good investment climates (Morriset & Pirnia, 2001). For example, having an METR of 20 percent instead of 40 percent raises FDI by 1 percent of GDP for countries ranked in the bottom half in terms of investment climate—while the same difference in METR had an effect eight times greater for countries in the top half. This finding implied that tax incentives were far less effective in weaker investment climates than in stronger ones. This observation was tested against the Global Competitiveness indicators, Index of Economic Freedom, and Heritage Foundation indicators of a good investment climate. Fiscal policy diverges across most of these indicators suggested that the investment climate is a critical precondition before fiscal policy can effectively encourage investment (Morriset & Pirnia, 2001).

Musyoka (2012) conducted a study to establish the relationship between tax incentives and foreign direct investments. The researcher used data for investments incentives, trade related incentives, import duty exemption and FDI inflows for a ten

years period. Mean, mode and median were calculated to measure dispersion while correlation and regression analysis were calculatedto establish the relationship between the dependent and independent variables. The results concluded that tax incentives lead to revenue losses by the government. Contrary to popular belief, research shows that, in general, tax incentives were not often very effective in attracting foreign direct investment (FDI).

Githaiga (2013) studied the impact of tax incentives on FDI inflows of firms listed at the NSE. The study involved collection of a time series data on investments and tax incentives from a sample of 10 firms listed at the NSE between years 2008 – 2011. The data was mainly from secondary sources, most attention being focused on annual reports and audited financial statements of the sampled firms. Correlation analysis was carried out on. The results were then analyzed to arrive at a conclusion on whether tax incentives had any impact in attracting FDI inflows in firms operating at the NSE. The results of the study revealed a strong relationship between wear and tear allowances and FDI inflows. Industrial Building Deductions and Investments Deductions had no significant relationship with FDI inflows. Despite strong relationship between Wear and tear allowances and FDI, further analysis on percentage change in FDI inflows across the study period showed that the Impact of tax incentives on FDI inflows was insignificant (Githaiga, 2013).

The literature on tax incentives and its relationship with stock market performance is not exhaustive. There remain more gaps on whether tax incentives are a gift or a motivator. These gaps stimulates the study objective number one of determining the effect of tax incentives on stock market performance of firms listed at NSE.

2.4.2 Liquidity Incentives and Stock Market Perfomance

Liquidity Incentives at NSE entail equity financing opportunities and diversification opportunities for investors. Mutua (2011) asserts that, companies listed at Nairobi Securities Exchange can access long-term capital from a wide range of local and international investors. The NSE is one of the world's best-performing exchanges, with a 35% growth rate in 2012 and a 47% growth rate in 2013. Issuers were assured

of a listing and trading environment that holds all market participants to the strictest standards of corporate governance (Mutua, 2011). NSE liquidity is exhibited by the frequency of its stock tradability.

Singh, Gupta and Sharma (2015) investigated the relation between stock liquidity and firm performance. The researchers hypothesized that liquidity plays an important role on performance of firms listed in Stock Exchange and that when there is a good flow of trading stocks; people could expect more financing through absorbing investors on the market. The sample of the study was the continuously NSE listed top ten indices over the period 2005-2014. To check the relationship between stock market liquidity and firm performance, the ordinary least sequence and general linear models were applied on Gretl and SPSS, respectively. The results of this study showed positive relationship between independent variables, return and age on dependent variable Tobin's Q. Further relationship between stock market liquidity and firm performance was also check and it was found that stock market liquidity was correlated with higher firm performance as measured by Tobin's Q.

Fang, Noe and Tice (2009) investigated the relation between stock liquidity and firm performance. The study showed that firms with liquid stocks have better performance as measured by the firm market-to-book ratio.This result is robust to the inclusion of industry or firm fixed effects,a control for idiosyncratic risk,a control for endogenous liquidity using two-stage least squares,and the use of alternative measures of liquidity. To identify the causal effect of liquidity on firm performance, the researchers studied an exogenous shock to liquidity—the decimalization of stocktrading—and showed that the increase in liquidity around decimalization improves firm performance. The causes of liquidity's beneficial effect were investigated. The study established that liquidity increases the information content of market prices and of performance-sensitive managerial compensation and that momentum trading, analyst coverage, investor overreaction, and the effect of liquidity on discountrates or expected returns do not appear to drive the results.

Abdul-Khaliq (2013) researched on the Impact of Stock Market Liquidity on Economic Growth in Jordan. The study identified the position of stock market liquidity at Amman Stock Exchange (ASE) during the period from 1991 to 2011 . For measurements of liquidity at ASE, the study used tow measuring tools as; market capitalization to GDP, the turnover ratio. Also, The research aimed to test the relationship between these indicators and the economic growth represented by the growth rate of GDP. The model adopted for testing the relationship was the simple linear regression model. It was established that market capitalization to GDP doesn't exert significant effect upon the economic growth but the turnover ratio has significant effect upon the economic growth.

Ahn and Chueng (1999) conclude that low liquidity is depicted from the significant high negative relationship between the spread and market depth. Pagano and Röell (1996) observe that greater transparency in the trading process enhances market liquidity by reducing the opportunities for taking advantage of less informed or non-professional participants. Cornell and Sirri (1992) found that market liquidity increased with information asymmetry, as insiders were able to obtain superior execution for their trades relative to the contemporaneous liquidity traders. In conclusion, it is important to note that the presence of uninformed traders in the market does not necessarily reduce market liquidity.

The existing literature leaves many unanswered questions on whether liquidity as incentives promotes stock market performance. These gaps stimulates the study objective number two of determining the effect of liquidity incentives on stock market performance of firms listed at NSE.

2.4.3 Growth Incentives and Stock Market Perfomance

Growth in the stock market can be viewed both as stock equity growth (partial growth) and total assets growth (full growth). Going public provides your company with equity financing opportunities to grow your business through expansion of operations to acquisitions. The issuance of public shares expands investor base, and

helps set the stage for secondary equity financings, including private placements. Issuers often receive more favorable lending terms when borrowing from financial institutions (Levine, 1996).

As a public company, shares can be utilized as an acquisition currency to acquire target companies, instead of a direct cash offering. Using shares for an acquisition can be a tax efficient and cost effective vehicle to finance such a transaction. This can also improve the ability to complete mergers and acquisitions in a more timely and cost-effective manner (Botosan, 1997).

Kyle (1984) found that liquid stock markets can increase incentives for investors to get information about firms and improve corporate governance. Obstfeld (1994) found that international risk sharing through internationally integrated stock markets improved resource allocation and accelerated the rate of growth.

In connection with takeovers, it may be desirable that the shares of the continuing company are listed on a stock exchange. The continuing company may thus use liquid listed shares as payment, in full or in part, to the shareholders in the ceasing company. Those shareholders will be able to make a more informed assessment of the offer if the values are fixed through a trustworthy marketplace (Boot *et al.*, 2006).

The African stock exchanges are seeing a growing demand for new issues (Glen, 1994). Opportunities to list are increasing with 23 domestic and 2 regional stock exchanges operating on the continent. Empirical evidence suggests that over the last three years, valuations achieved by many private equity firms in Africa via a stock listing yielded a higher return than could have achieved in a private transaction (Glen, 1994). While private equity firms in the US and in the UK are increasing using IPOs to exit investments, african private firms are still dragging their feet, hence lagging behind their developed market peers when it comes to using IPOs to exit investments (Glen, 1994).

Capital intensive companies, particularly high tech companies, always need to raise high volumes of capital in their early stages. For this reason, the public market

provided by the stock exchanges is one of the most important funding sources for many capital intensive startups (Cornell & Sirri, 1992). Cornell and Sirri (1992) add that, after the 1990s and early-2000s hi-tech listed companies' boom and bust in the world's major stock exchanges.

Realization of a company's commercial potential requires a capital base which often exceeds the company's existing capabilities (Glen, 1994). Listing creates greater access to unlimited capital resources. As the company develops, it can raise further capital through the issue of new shares (Donna *et al.*, 2013).

Sudhakar and Sasikumar (2010) conducted a research to understand the market of mutual funds in India and examined the factors that not only influenced its growth but also affected the different stakeholders in the market. It was observed that mutual funds were forced to encounter a large number of factors that certainly turned out to be barriers in their growth process. These factors created obstruction in the efforts of government to make the Indian mutual fund industry as an integral part of the world financial market. It was found that long experience, knowledge of financial principles, the qualifications of investors who manage the firm; past performance of the stock and the analysis of disclosing financial statements increased the investors' confidence.

Beyond the advantages to the entrepreneur, advantages also accrue to the countries in terms of economic growth especially through having more companies listed on the country's stock markets thereby giving more opportunity for local people to invest their savings. Leuz and Verrecchia (2000) assert that, more listings would hopefully lead to an active stock exchange and more liquidity provides an exit strategy for both investors and issuing firms. This helps to promote adoption of illiquid long term projects since investors may liquidate their stock position through the market, investors need not wait until the long-term project pays off to smooth their consumption plans (Leuz & Verrecchia, 2000).

The empirical studies above on the relationship between growth and stock market performance have shown that stock market performance is positively related to

growth incentives. However, the above studies still remain grey upon the introduction of investor perceptions in the stock markets. It matters to policy makers to understand the effect of growth incentives on performance since investors' perceptions always exist in the market and cannot be differentiated from investors when it comes to decision making. Policy makers should understand whether growth incentives are a gift or a motivator in the stock markets when perceptions exist. Subsequent chapters aim to clear this gap.

2.4.4 Visibility Incentives and Stock Market Perfomance

Stock market visibility incentives entail media coverage, publicly filed documents and industry stories, all of which translate to better image and high visibility of listed firms as opposed to unlisted firms (Levine, 1996). Presence on the stock exchange improves consumer awareness and confidence and improves company marketability and recognition (Glen, 1994). Listing on the stock exchange is accompanied by particularly significant attention from the local media (Donna, 2013).

Financial visibility is defined by Mehran and Peristiani (2009) as a measure for asymmetric information: it is the ability of a firm to attract an adequate level of investor interest and recognition (analyst coverage). Thus, the intermediate role played by securities analysts can affect a firm in a number of ways (e.g., liquidity and monitoring). As a consequence, a negative relationship is assumed between the degree of financial visibility and the decision to go private. Another way to assess investor interest is to examine the liquidity of the stock and the related trading costs. The liquidity of share trading is a primary benefit of going public (Boot et al., 2006). If the stocks' liquidity benefit deteriorates, the firm will be more likely to go private.

Donna *et al*. (2013) argues that public companies are prominently featured in major newspapers and magazines than a private enterprise. The constant and timely use of company announcements, press releases and industry news stories can increase investor awareness, shareholder value and demand for the shares. A strong marketing strategy and awareness campaign coupled with smart public relations initiatives as

offered by the stock markets can potentially increase sales and thus increased revenue for companies (Levine, 1996).

Periodic analyst reports and publication of daily share prices contribute to increased publicity which leads to enhanced corporate image. Listed company's stories and news transient across borders and this allows for investors in other countries to become aware of listed companies. Publicly listed companies are subject to the rules of the securities commission and the Stock Exchange's self-regulatory rules that it provides investors with confidence (Glen, 1994).

Donna *et al.* (2013) sought to investigate whether listed companies attain visibility incentives as compared to the unlisted companies. The researcher found that a listed company was more visible than an unlisted one. The researcher also found that the media constantly follows the developments of listed companies. The researcher recommended for the use of efficient electronic information distribution channels for press releases. It was concluded that the daily price information in printed media serves as a constant reminder of developments among listed companies. Donna *et al.* (2013) posits that a public listed company always receives more publicity and media attention than a private enterprise. This is often advantageous as it helps to inform the company's potential customers, employees, vendors etc. about the company, its products and services. The perception of a company amongst its vendors, employees, bankers and customers can significantly alter the destiny of a company. A public listed company communicates seriousness, credibility and stature (Donna *et al.*, 2013).

Glen (1994) asserts that, going public enhances your company's visibility. Greater public awareness gained through media coverage, publicly filed documents and coverage of company's stock by sector investment analysts can provide companies with greater profile and credibility. Ultimately, this will result in a more diversified group of investors following associated companies, which may increase demand for the company's shares and thus increase company's value.

In a global economic order, building a strategic alliance with complementing strength can greatly enhance the competitiveness of a company (Noble & White, 2012). Being a listed company can help enhance strategic strength of the company thereby contributing to continuous business expansion and the strengthening of it operations. A listed company is viewed to be more competitive than a none-listed one. It generally has a board of directors that transcend all the strategic sectors and geographical zoning (Mutua, 2011).

Mutua (2011) argues that, because the CMA and the NSE scrutinize listed companies before approving listing status, they generally present a positive public image. To a certain extent, listed companies are also perceived as being financially healthy as well as carrying out transparent information disclosure (Donna *et al*., 2013). This image may play an important role in boosting the firm's credibility, increasing its bargaining power, and indirectly building awareness and popularity with regard to its products and services.

The market value of a public company is usually much higher compared to a private company with the same structure in the same industry (Hail & Leuz, 2006). Hail and Leuz (2006) argue that when you convert a private company to a public company, it results in a substantial increase in value to owners. Blue Chip and High tech companies are valued even higher due to solid growth and consistent profits (Glen, 1994). Investors in a private company discount the value of equity securities due to lack of liquidity driven by the absence of a public market for them (Hail & Leuz, 2006). Public companies often are valued so much higher than similar private companies in the same industry (Donna *et al*., 2013). Many institutional and individual investors prefer investing in public companies since they have a built-in "exit strategy," that is, they can sell their shares in the public market if they choose to do so (Hail & Leuz, 2006).

It's important to note that the ability to share risk with public investors is also a primary benefit derived from being a public firm. Shah and Thakor (1988)'s studyfound out that the public status was appealing because it allowed the risk to be shared more efficiently with the public investors who eliminated the idiosyncratic

risk by maintaining well-diversified portfolios. Conversely, a firm can go private when the idiosyncratic risk is low and public status no longer provides a risk-sharing advantage.

Hillert and Ungeheuer (2016) analyzed the relation between firm visibility and stock returns, using a novel dataset on New York Times coverage of U.S. Firms from 1924 to 2013. The study found that firms with persistently higher levels of media coverage exhibit predictably higher returns. Top-quintile outperformed bottom-quintile coverage stocks by 2.64% per year (Sharpe Ratio of 0.47, Momentum: 0.47). Higher media coverage predicted significant improvements in corporate governance, as well as higher sales growth and profitability growth. Thus the evidence was consistent with visibility creating value through monitoring and advertising, while stock markets inadequately price the positive effects of firm visibility.

The above studies on the relationship between visibility incentives and performance have shown that being listed at NSE enhances company image, investors' confidence and greater public awareness. However, the studies have not been able to demonstrate support for investors to have their companies listed at NSE because of these existing incentives. Researchers are in contention whether visibility incentives are a gift or a motivator. These gaps stimulates the study objective number four of determining the effect of visibility incentives on stock market performance of firms listed at NSE.

2.4.5 Moderating effect of Investors' Perceptions on Investment Incentives and Stock Market Perfomance

Investors' perceptions are determined by those behaviours such as herding, overconfidence, mental accounting among others (Lamont & Thaler, 2013). Investors and fund managers are portrayed as herds that charge into risky ventures without adequate information and appreciations of the risk-reward trade-offs and, at the first sign of trouble, flee to safer havens. Some observers express concern that herding by market participants exacerbates volatility, destabilizes markets, and increases the fragility of the financial system (Admati & Pfeiderer, 1997).

Herding results from an obvious intent by investors to imitate the behavior of other investors. This should be distinguished from "spurious herding" where groups facing similar decision problems and information sets take similar decisions. Such spurious herding is an efficient outcome whereas "intentional" herding need not be efficient (Gul, 1991). But it needs pointing out that empirically distinguishing "spurious herding" from "intentional" herding is easier said than done and may even be impossible, since typically, a multitude of factors have the potential to affect an investment decision (Gul, 1991).

Fundamentals-driven spurious herding out of equities could arise if, for example, interest rates suddenly rise and stocks become less attractive investments (Lamont & Thaler, 2013). Investors under the changed circumstances may want to hold a smaller percentage of stocks in their portfolio (Admati & Pfeiderer, 1997). This is not herding according to the definition above because investors are not reversing their decision after observing others. Instead, they are reacting to commonly known public information, which is the rise in interest rates. Spurious herding may arise if the opportunity sets of different investors differ (Lamont & Thaler, 2013).

Mokua (2003) argues that, intentional herding may be inefficient and is usually characterized by fragility and idiosyncrasy. It can lead to excess volatility and systemic risk. Therefore, it is important to distinguish between true (intentional) and spurious (unintentional) herding. Furthermore, the causes of investor herding are crucial for determining policy responses for mitigating herd behavior (Lamont & Thaler, 2013). How does one empirically distinguish between informational, reputation-based, and compensation-based herding? One approach would be to examine whether the assumptions underlying some of the theories of herd behavior are satisfied (Gul, 1991).

Experience exerts statistically significant positive effect on overconfidence (Alrabadi *et al.,* 2012). With time-tested strategies investors get overconfident and their experience with these strategies always increases their confidence. This psychological aspect was explored through regression analysis on the Jordanian

investors. It was shown that the Jordanian investors are overconfident of their trading skills and investment decisions they make through strategic planning (Alrabadi *et al*., 2012).

The prospect theory can be used to explain quite a few irrational financial behaviors. For example, there are people who do not wish to put their money in the bank to earn interest or who refuse to work overtime because they don't want to pay more taxes. Although these people would benefit financially from the additional after-tax income, prospect theory suggests that the benefit (or utility gained) from the extra money is not enough to overcome the feelings of loss incurred by paying taxes (Paulos, 1988). Prospect believers tend to look at the losses as having greater impact than an equivalent amount of gains (Kahneman & Tversky, 1979).

Prospect theory also explains the occurrence of the disposition effect, which is the tendency for investors to hold on to losing stocks for too long and sell winning stocks too soon. The most logical course of action would be to hold on to winning stocks in order to further gains and to sell losing stocks in order to prevent escalating losses (Mokua, 2003).

Geetha and Ramesh (2011) explored the perceptions and behaviors of the small investors towards the mutual funds. They found that, many of the facts present in the country were inevitable for mutual fund companies to change their present strategies to survive and penetrate potential market. The study further established that the personal profiles of investors such as age, educational qualification, profession, annual family income and quantum of monthly savings had a direct influence over the investors in making mutual fund investment decisions.

Musyoka (2012) investigated the perception of users regarding the availability, adequacy and usefulness of information disclosed in the financial reports of companies listed on the Nairobi Securities Exchange (NSE). The researcher concluded that the availability, adequacy, and timeliness of relevant information about marketable securities were important for both pricing efficiency and market confidence. The investors must be fully informed of relevant facts to make sound

judgments about the value of securities. This clearly demonstrated that investors' perceptions play a paramount role in influencing investors' choices in the stock market.

Mokua (2003) analyzed the investors' perception towards Social, Political, Economical, Regulatory, Technological, Environmental and Legal (SPERTEL) risks on the value of equity shares in the market. The researcher found that SPERTEL risk had an influence over the market price of the share. It was also observed that except for the social factors between married and unmarried investors, political, regulatory and legal factors, all other factors were insignificant.

Warne (2012) conducted a study on the investment behaviour of individual investors in stock markets, specifically their attitude and perception with respect to the stock market performance. Respondents were classified into different categories on the basis of income, profession, education status, sex and age. Primary data was collected from a sample of 50 investors of Ambala District. The results from the study revealed that the level ofawareness level and duration of investment affects the investment behaviour of individual investors. Still this proves the fact that perceptions are superior in terms of influencing stock market performance.

Ajmi (2008) conducted a study to determine the main determinants of risk tolerance of individual investors by collecting responses from 1500 respondents. The general objective was aimed at determining the main determinants of risk tolerance of individuals. By use of the questionnaire method the researcher found out that men were less risk averse than women, less educated investors were less likely to take risk and age factor was also important in risk tolerance and also investors were more risk tolerant than the less wealthy investors. This research was similar to the findings of Kaneko (2004) who focused on investment trusts and discussed the behavior of individual investors to find out that investment trusts were the only of means managing assets.

For an investor to imitate others, he or she must be aware of and be influenced by others' actions (Mokua, 2003). Overconfidence has been proven to dominant among

many stock market investors who have speculated and emerged as winners in the past (Alrabadi et al., 2011).Prospect investors tend to fear the loss more than the gain and they believe that the utility gained from the extra money gained in the past is not enough to overcome the feelings of loss incurred by paying taxes in the present times (Paulos, 1988).

The above studies have found out that perceptions influence stock market performance. Also, when focusing the effect of incentives on stock market performance, the researcher established that incentives affect stock market performance. There is need to understand the relationship between incentives, perceptions and performance so as to be able to draw a clear line of understanding on the question, what matters most, incentives or perceptions? The investor perception therefore forms the moderating influence of the relationship between investment incentives and performance of firms listed at NSE.

2.4.6 Stock Market Performance

Although common, the term stock market may is somehow abstract for the mechanism that enables the trading of a company's stocks. The term 'stock market' is used to describe the totality of all stocks, especially within a country. A stock market can be measured by its performance to determine its progress. Many researchers have atempted to explain stock market performance expectations:

Fama (1970) argues that asset prices promptly reflect all available information such that abnormal profits cannot be produced regardless of the investment strategies utilized since asset prices evolve according to a random walk. Thus, asset prices cannot be predicted, and investors cannot beat the market. The argument has received critics that policymaker's interventions may disrupt the market and cause it to be inefficient as well that the three forms of the EMH are usually used as guidelines rather than strict facts (Levich, 2001). Also, most empirical studies have examined the EMH in its weak or semi-strong forms, partly because the strong form

is difficult to measure, and there is a high cost associated with acquiring private information (Timmermann & Granger, 2004).

Capital Asset Pricing Model (CAPM) uses only the market performance as a single factor to determine stock market performance (Sharpe, 1963). This problem had led to alternative model to explain the stock Performance variation called the Arbitrage Pricing Theory (APT) as it is based on fewer assumptions about the stock market characteristics as compared to CAPM. Multi-factor asset pricing models were predominantly based on the assumption that stock performance was affected by different economic factors. Financial information and macroeconomic variables could predict a notable portion of stock Performance (Ross, 1976).

According to NSE (2013), the Nairobi Securities Exchange (NSE)'s NSE 20-Share Index (NSE 20) is the long-standing benchmark index used for equities traded on Kenya's Nairobi Stock Exchange (NSE) and represents the geometric mean of share prices of the NSE's 20 top stocks. The NSE 20-Share Index was introduced in 1964, one year after African natives were first allowed to trade on the NSE. It was joined in February 2006 by the NSE All Share Index (NASI), aimed at reflecting the total market value of all stocks traded on the NSE in one day rather than just the price changes of the 20 best performers captured by the NSE.

NSE (2013) reveals that the members are selected based on a weighted market performance for a 12 month period as follows: Market Capitalisation is 40%, shares traded are 30%, number of deals is 20% and turnover is 10%. Index is updated only at the end of the day. Companies included in the index are Mumias Sugar, Express Kenya, Rea vipingo, Sasini Tea, CMC Holdings, Kenya Airways, Safaricom, Nation Media Group, Barclays bank of Kenya, Equity Bank, Kenya Commercial Bank, Standard Chartered Bank, Bamburi Cement, British American Tobacco, Kengen, Centum Investment Company, East African Breweries, EA Cables, Kenya Power and Lighting Company Limited and Athi River Mining.

This index primarily focuses on price changes amongst those 20 companies. Osoro (2013) in Gatuhi (2015), notes that there have been complaints about the computation of the NSE 20 SHARE Index. The feeling has been that it is not

reflective of the market performance. He adds that this is partly because the index is equally weighted. For instance, this meant that KenGen, which has a market capitalization of about KSh57 billion carries the same weight as Express Kenya, under market capitalization which is only KSh. 814 million or a seventh of its size as at February 2008. Assigning equal weights to two companies with such a huge difference in their market capitalization is obviously unrealistic. Nevertheless, it has not been eliminated as a way of measuring performance and so both market capitalization and market turnover were used in this study.

2.5 Critique of the Literature

Although considerable attention has been devoted to the study on the intended benefits of incentives, there is little empirical work on the effect of such perceptions on the relationship between stock market incentives and performance. Many studies that have been conducted on stock market incentives have been biased to only the focus of tax incentives alongside many other incentives which the stock market offers upon listing.

Githaiga (2009) researched on the impact of tax incentives on FDI inflows of listed firms at NSE. On the analysis of percentage change in FDI inflows across the study period, the researcher's results showed that the impact of tax incentives on FDI inflows was insignificant. The researcher did not however get deeper into explaining the potential factors which contributed to thatinsignificance in the above relationship.

Kukreja (2012) studied investor perception on the stock market in Indian context and the researcher's results revealed that age has significant impact on investment, and educational qualification has significant impact on tax advantages. Investment influences and investment benefits had high relevance and hence perceptions had higher effects on perfomance as compared to even those other factors as tax incentives and awareness levels. This researcher however failed to focus on all incentives and their respective impact on perfomance.

James (2009) sought to determine the relationship between incentives and investments. The researcher established that the investment climate was especially crucial for determining the effectiveness of incentives in attracting foreign direct investment (FDI). Although lowering effective tax rates helped boost FDI, the effect was eight times stronger for countries with good investment climates. This finding helped explain why incentives were attracted to investments in some countries yet failed in others.

Mugabi (2001) used a cross-sectional survey design and applied quantitative data to analyze the influence of investors' perception of stock market regulations, stock market incentives and their level of awareness on the Intention to participate in Securities at the Uganda Securities Exchange. A sample of 250 respondents was used and the findings were analyzed using SPSS. The study established that stock market regulation, stock market incentives and investor awareness; all affected the decision to invest on the stock exchange positively and accounted for 35% of the variance in decision to invest. The study failed to clearly highlight and explain the relationship between the stock market incentives and performance, it failed to explain the effect that investors' perceptions had towards stock market performance.

The studies cited in the literature mostly concentrate their focus on only one form of incentives, tax incentives, whereas there are other incentives. The studies have failed to show the relationship between incentives and performance. Most of this studies have been conducted in the context of developed nations and they have failed to look at some of the factors affecting local investors' perceptions on the flabbergasted relationship between performance and incentives, thereby raising a lot of questions as to whether these incentives are really a motivator or a gift towards investing at the Nairobi Securities Exchange. The next chapter will clarify on these matters.

2.6 Research Gaps

The studies have failed to uncover the relationship between investors' perceptions and stock market incentives with regard to performance of the NSE. It is not clear whether there exist a predictable relationship at all and whether the relationship is

either positive or negative. In the success of this research to clear the air about this researcher controversy, this research provides a contribution and discovery to Finance specialists and policy makers who are concentrating more on the treatment of symptoms and problems and not the causes of such problems, in this case, the imperishable performance of the stock market whenever incentives are inherent. It gives more insights unto the best ways to go along attracting stock market investors rather than blindly depending on the incentives' way without any study, or rather, test of validity of the efficiency of those incentives in re-engineering the stock market performance.

In view of the limited literature and in view of the need to explore more unto the stock market incentives, perception and how they affect performance, this study was conducted so as to enlighten policy makers on their legislative prospects. The remaining chapters are those of methodology, findings, conclusions and recommendations that are presented in the consecutive chapters.

2.7 Summary

This chapter explained the theoretical literature, empirical literature, critique of the empirical literature and an illustration of the conceptual framework. In the theoretical review, the chapter focused on the efficient market hypothesis (EMH) whose main argument is that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. The Agency theory postulates that the agent who in this case is the CMA offering investment incentives is in a point of conflict with the principal who in the same case is the government if the offered investment incentives do not promote stock market performance. The prospect theory finally states that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics. The empirical literature focused on the effect of tax incentives, liquidity incentives, growth incentives and visibility incentives on stock market performance and also the moderating effects of perceptions on such performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in data collection, analysis and presentation. Section 3.2 describes the research design, section 3.3 describes the target population, section 3.4 describes the sample and sampling design, section 3.5 describes the data and data collection procedure, section 3.6 describes the pilot test and finally section 3.7 describes data analysis and presentation.

3.2 Research Design

This study used descriptive and retrospective research designs. A descriptive study is one in which information is collected without changing the environment. Retrospective research design collects data from past records and does not follow data up as is the case study (Creswell, 2003). Adams *et al.* (2007) asserts that, descriptive studies has ability to answer research questions such as "what is happening? How is something happening? Why is something happening? A descriptive study determines and reports the way things are.

The choice of these designs was based on the fact that the research was interested on the state of affairs already existing in the field and no variable was to be manipulated. This study therefore was able to generalize the findings to the larger population. The main focus of this study was quantitative. However some qualitative approaches were used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study.

3.3 Target Population

Target population is a computed set of individuals, cases or objects with some common observable characteristics of a particular nature distinct from other population. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. This definition ensures that the population of interest is homogeneous. Population consists of every element in the area of study. The target population for this study constituted all the 60 companies listed at NSE as attached as Appendix II below.

3.4 Sampling Frame

Cooper and Schindler (2011) describes sampling frame as the list of all population units from which a sample can be selected. The sampling frame consists of a list of items from which the sample is to be drawn. In this study the sampling frame was the list of 60 companies attached in Appendix II from which the sample size (Appendix III) was drawn. The sample size was drawn from NSE website.

3.5 Sample and Sampling Design

A sampling frame is a complete list of the units of analysis of interest from which the samples are selected while a sample size is the number of items to be selected from the universe to constitute a sample (Kothari, 2004). Optimum sample size was used to fulfill the requirements of efficiency, representativeness and reliability. Unnecessary large sample size would bring about data duplicity besides having cost and time implications while a smaller sample size would not be representative. The sampling frame was drawn from the NSE Website.

The study adopted multistage sampling technique where the firm sample size was determined and then the sample for the respondents' size. Stratified random sampling technique was adopted whereby the researcher divided the population into different

strata (which should be homogenous i.e. each element in every strata is homogenous) and then applied systematic random sampling technique in which every 2nd element was picked to be part of the sample from the list. The procedure involved in systematic random sampling is very easy and the results are representative of the population unless certain characteristics of the population are repeated for every nth individual, which is unlikely (Moore *et al*., 2012). The sample size was as shown in the Table 3.1:

Table 3.1 : Stratified Sample Size

STRATUM	A	B	C	D	E	F	G	H	I	J	TOTAL
Population Size	7	9	2	4	10	6	4	9	5	4	60
Systematic size, every 2nd element	3	4	1	2	5	3	2	5	3	2	30
Respondents (5 managers per firm)	15	20	5	10	25	15	10	25	15	10	150

The stratum A-J represents the 10 industries listed at NSE namely: Agricultural, Commercial and Services, Telecommunication and Technology, Automobiles and Accessories, Banking, Insurance, Investment, Manufacturing and Allied, Construction and Allied and Energy whose values were picked from the classification in Appendix II. 150 respondents were answerable to the questionnaires, these constituted 5 managers from each of the listed firms selected for the sample as attached in Appendix III. 5 managers were picked to provide heterogeneity information regarding the study questions as opposed to 1 manager per firm. The reason as to why managers were picked for this study is because they are the ones who were in a position to give the required critical information on the data relating to incentives and perceptions for the periods covering year 2003-2014. A sample of 30 companies which is 49.18% of the total population was used. This is far much greater than the 30% recommended (Mugenda & Mugenda, 2003).

3.6 Data Collection Instruments

Data collection tools are the instruments which are used to collect the necessary information needed to serve or prove some facts (Mugenda & Mugenda, 2003). Primary data was collected through the use of questionnaires. The study preferred questionnaires because they are easy and cheaper to administer to respondents and are moreover convenient for collecting information within a short span of time. Questionnaires are highly versatile, easy to construct and convenient to work with, data collection is easy to process as the questionnaire is straight forward and produces superficial data touching on comprehensively to specificity (Adams *et al.,* 2007).

The questionnaire was divided into the main areas of investigation except the first part which captured the demographic characteristics of the respondents. Other sections were organized according to the major study objectives. Secondary data was collected from company websites, audited annual financial statements and company releases.

3.7 Data Collection Procedure

The data collection procedures that were chosen by the study were determined by the objectives of the current study. Teddlie and Tashakkori (2010) equally observe that the type of data collected through an appropriate instrument is informed by the purposes of the study. The study used both the primary and secondary data. Louis, *et al.* (2007) described primary data as those objects that are original to the problem under study while secondary is defined as data collected using information from studies that other research have made of a subject.

Primary data was collected by semi-structured questionnaires. A questionnaire is a set of systematically structured questions used by a researcher to obtain needed information from respondents (Munn & Drever, 2004). Through the help of the

research assistants, a total of 150 questionnaires were administered to the selected respondents in the 10 selected strata. The research assistants were equipped with the relevant skills and knowledge that enabled them to answer and handle any query from the respondents. This measure helped to boost the rate of responses from the respondents in returning the questionnaires.

The indicators (constructs) were structured to capture information on the predictor variables (tax incentives, liquidity incentives, growth incentives and visibility incentives) and response variable (stock market performance). A follow up time schedule was agreed upon between the researcher and the research assistants to guide supervision of the research progress.

According to Mugenda and Mugenda (2003), breaching confidentiality, is a matter of concern to all respondents. In view of this, the study withheld the names of the respondents and their respective view with utmost confidentiality. Respondents were assured of their privacy and this paved room for them to freely disseminate the information in their custody for the benefit of this study.

Dawson (2009) describes secondary data as data collected by others and found by the comparative studies in ethnographies, censuses, histories and other relevant sources. Secondary data was collected from company websites, audited annual financial statements and company releases. This was done by review of documents and appropriate referencing to overcome the research sin of plagiarism.

3.8 Pilot Test

Pilot test is an activity that assists the research in determining if there are flaws, limitations, or other weaknesses within the interview design and allows researchers in making of necessary revisions prior to the implementation of the study (Adams *et al*., 2007). The rule of the thumb is that 1% of the sample should constitute the pilot test. This comprised two respondents from the researchers' sample size.

Pilot Testing ensures and that the field staff have a common understanding of the instrument and that guidelines are provided alongside the questionnaire (Creswell,

2003). Cooper and Schilder (2011) indicate that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. According to Babbie (2004), a pilot study is conducted when a questionnaire is given to just a few people with an intention of pre-testing the questions.

According to Munn and Drever (2004) validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity employed by this study is a measure of the degree to which collected data using a particular instrument represents a specific domain or content of a particular concept. Adams *et al*. (2007) observes that the purpose of the pilot study is to assess the clarity of the instruments and the validity and reliability of each item in the instruments.

Orodho (2004) posits that piloting addresses several questions including, are the questions measuring what they are supposed to. Do the respondents interpret all the questions the same way? And do the questions provoke a response? A pilot study was conducted.

The pilot test helped to confirm if the study was ready for full-scale implementation. The pilot test served as a trial run for this study and helped to determine if any adjustments to implementation plan, any adaptations to the study are necessary and revealed unforeseen challenges that could arise during implementation and ensure that the study was well prepared to handle the issues that came up during the full-scale implementation. The Pilot test conducted revealed that the questionnaire which was the main data collection instrument contained relevant information that could inform the study findings as per the pre-determined study objectives. It was however noted that some questions could not be understood properly by some respondents as they contained some technical finance terms which lay-respondents were not well acquinted with. To amend this difficulties, the researcher rephrased the language to suit all respondents so as to ensure accuracy with the manner in which the information was understood and thus collected from the respondents.

The aim of pilot test is to determine the validity and reliability of the instruments; this was achieved as below explained:

3.8.1 Validity of Instruments

Creswell (2003) asserts that validity is the strength of qualitative research, although other researchers prefer to substitute validity with terms such as trustworthiness, credibility, transferability, dependability, and conformability. Validity exists when the knowledge sought is arrived at through descriptions that make possible a understanding of the meanings and essences of experience (Castillo, 2009).

To make valid inferences from the text, it is important that the classification procedure be reliable in the sense of being consistent: different people should code the same text in the same way (Waber, 1990). Strategies for validating the accuracy of research findings offered by Creswell (2003) included obtaining data from three different sources of information or triangulation, member checking, which involves having the research participants review final reports to determine accuracy, and documentation using rich, thick descriptions. The researcher adopted Creswel (2003)'s criteria to ascertain validity of the study instruments.

3.8.2 Reliability Test

According to Shanghverzy (2003), reliability refers to the consistency of measurement. The study used the Cronbach (Alpha – α) model to test the reliability of the data. Brown (2002) indicates that Cronbach's alpha reliability coefficient normally ranges between 0 (if no variance is consistent) and 1 (if all variance is consistent). The closer the coefficient is to 1.0 the greater the internal consistency of the items in the scale. An alpha (α) score of 0.70 or higher is considered satisfactory (Gliem & Gliem, 2003). An average alpha value of 0.73025 was found indicating that the values were satisfactory to lay trust on the data collection instruments.

The findings of the internal reliability of the questionnaire showed an average of 0.7303 Cronbach's alpha value as in Table 4.5 in chapter 4. This gave room for the

researcher to pursue the research in full swing having proven that the instruments were reliable and valid, required no amendments to provide expected results.

3.9 Data Analysis and Presentation

This section presents the conceptual and analytical models that are used to analyze data. Operationalization of variables and their measurements is also presented together with the diagnostic tests conducted on the data. The section crowns it all by specififying the particular ways in which data was presented

3.9.1 Conceptual Models

The dependent variable for this model was expressed as a percentage change of the stock market performance to a function of percentage changes in tax incentives, liquidity incentives, growth incentives, visibility incentives and investors' perceptions. The following 5 conceptual models were therefore drawn regarding the various incentives the study sought to investigate as follows:

$SP = f(TI)$ (1)

$SP = f(LI)$ (2)

$SP = f(GI)$ (3)

$SP = f(VI)$ (4)

$SP = f(TI, LI, GI, VI, IP)$ (5)

Where:

SP =Stock market Perfomance

TI= Tax Incentives

LI= Liquidity Incentives

GI= Growth Incentives

VI= Visibility Incentives

3.9.2 Operationalization of Variables

Investments variables were measured using stock market turnover ratio of sampled firms while stock market incentives variables were measured using the percentage changes in the number of investments upon their introduction. The study used the Likert type scale as the rating scale in questionnaires.

According to Adams *et al.* (2007), Likert scales are often used with matrix questions. The items that are used in Likert scales are usually declarative in form. Ranjit (2005) claims that Likert scales are the easiest to construct and are based upon the assumption that each statement/item on the scale has equal attitudinal value, importance or weight in terms of reflecting an attitude towards the issue in question. The numbers in a Likert scale are ordered such that they indicate the presence or absence of a characteristic being measured.

Data collected was therefore mostly quantitative in nature and was analyzed by aid of Stata statistical software. Below is a description of the key characteristics and terms of measurement for each variable. This study focused on stock market incentives offered at NSE.

Dependent, moderating and independent variables were grouped into components; namely; tax incentives, liquidity incentives, growth incentives and visibility incentives. The moderating variable was stock market perceptions while the dependent variable consisted of performance indicators namely, market capitalization, stock index and market turnover. The terms of measurement used are described as in Table 3.2:

Table 3.2 : Measurement of Variables

Measurement Variables	Terms of measurement
Tax Incentives	▪ Investment Tax Credit = (Net capital investment amount made during the year that was taxable × the investment tax credit percentage, which has been annualized) Adjusted and appropriate gross receipts percentage as required.
Liquidity Incentives	▪ Variance= mean price for the established period and then subtracting this figure from each price point. ▪ Standard deviation= square root of the variance
Growth Incentives	▪ P/E ratio = Price per share / EPS -Once the P/E is calculated, the PEG ratio's formula: ▪ PEG ratio = P/E ratio / earnings growth rate
Visibility Incentives	▪ Sales Growth Ratio=(Current period sales-Previous Period sales) / (Previous Period Sales)×100 ▪ Profitability Growth Ratio=(Current Period Profitability-Previous Period Profitability) / (Previous Period Profitability)×100
Market capitalization	▪ MC=Outstanding shares×Current market price of one share.
Stock Price Index	▪ SPI = Current Market Capitalization / Market Capitalization in Period 0
Market Turnover ratio	▪ MTR= Total value of shares traded during the period/average market capitalization for the period.
Investors' Perception	▪ Likert Scale

3.9.3 Analytical Models

After tabulating and analyzing data collected, analytical model was estimated. Percentage changes in dependent variable were multiplied by respective correlation coefficients and then summed up together with the error term and the constant term to arrive at percentage change in stock market investments. The analytical model used in the study is explained below:

General Analytizal Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad \text{(i)}$$

Where:

Y = Stock Market Performance

β_0 = Constant term

$\beta_{1\text{-}4}$ = Correlation coefficients

X_1 = Tax Incentives

X_2= Liquidity Incentives

X_3= Growth Incentives

X_4= Visibility Incentives

ε = Error term

Analytical Model for Measuring Moderating Effect

Step 1:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_4 Z_i + \varepsilon$$

Where:

Z_i is the moderating variable (investors' perceptions).

Step 2:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_4Z_i + Z_i\ (\beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4) + \varepsilon$ (ii)

Where:

Y = Stock Market Performance

β_0 = Constant term

$\beta_{1\text{-}4}$ = Correlation coefficients

X_1 = Tax Incentives

X_2= Liquidity Incentives

X_3= Growth Incentives

X_4= Visibility Incentives

Z_I= Investors' Perceptions

Criterion rule:

Z=1 if investor perceptions is positive

Z=0 if otherwise

ε = Error term

3.9.4 Diagnostic Tests

This section presents diagnostic tests conducted in this study. They entail: Hausman test, normality test, multicollinearity test and autocorrelation tests.

3.9.4.1 Hausman Test

Hausman test was conducted since panel data was used to determine whether there was need to run a fixed effects model or a random effects model (Hair *et al.*, 2010). Hausman test was conducted in this study to see whether to estimate a fixed effects model or a random effects model since data collected was panel data ie both cross section and time series data. The hypothesis to be tested was that the preferred model is fixed effects vs. the alternative the random effects. This was done using e-views. If the probability of the chi-square test is less than 0.05, then f this is < 0.05 (i.e. significant) use fixed effects otherwise random effect.

3.9.4.2 Normality Test

Normality tests were conducted to determine the normality of variables. This was done by use of skewness and kurtosis. According to Kline (2011), the univariate normality of variables can be assumed if the skewness statistic is within the interval (-3.0, 3.0) and the kurtosis statistic lying in the interval (-10.0, 10.0). The results of this test were presented in form of tables.

3.9.4.3 Multicollinearity Test

The VIF values were determined to see whether the correlation could be problematic or not. The issue of multicollinearity may arise if two or more variables are highly correlated. It may affect the estimation of the regression parameters (Hair *et al*., 2010). Multicollinearity can be detected either by examining the correlation matrix or by the variance inflated factor (VIF). The most common multicollinearity detection test is the Variance Inflation Factor (VIF) for each independent variable. If the VIF is more than 10 for any independent variable, it indicates that this variable is highly explained by other variables and might be considered for exclusion from the

model. For this study, VIF for each independent variable was done and all those variables whose VIF was found to be above the cut off value of 10 were excluded (Hair *et al*., 2010).

3.9.4.4 Autocorrelation Test

The Dubin Watson's Autocorrelation test was computed to test for serial correlation's absence or presence. Campbell *et al.* (1997) asserts that, one of the most visible stylized facts in empirical finance is the autocorrelation of stock returns at fixed intervals (daily, weekly, and monthly). This autocorrelation has presented a challenge to the main models in continuous-time finance, which rely on some form of the random walk hypothesis. Consequently, there is an extensive literature on stock return autocorrelation (Campbell *et al.*, 1997).

Most studies on autocorrelation of individual stock returns have focused on the average autocorrelation of groups of firms, finding it to be statistically insignificant and usually positive for a cross-country survey (Säfvenblad, 2000).

For example, Chan (1993) models the effect of nonsynchronous trading, and predicts that individual stock returns show no autocorrelation, while portfolio returns exhibit positive autocorrelation due to positive cross-autocorrelation across stocks. Testing this model, Chan (1993) finds support for positive cross-autocorrelation, and for his prediction that the cross-autocorrelation is higher following large price movements.

The degree of first order linear auto-correlation in the multiple linear regression dataof variables can be assumed if the Durbin-Watson statistic is within the interval ($1.5<d<2.5$) (Durbin & Watson, 1971). Homoscedasticity and normality of residuals were checked using the Q-Q-Plot. The results of this test were presented in form of tables and graphs.

3.9.5 Substantive Tests

This section presents substantive tests that were undertaken and their results. The main substantive tests that were conducted in this study and whose findings are herebelow stipulated were regression and correlation analysis.

3.9.5.1 Regression Analysis

Multiple regression analysis is a statistical method utilized to determine the relationship between one dependent variable and one or more independent variables (Hair *et al.*, 2010). This study will employ a multiple linear regression analysis using Return on Assets (ROA) and Return on Equity (ROE) as proxy for the firm's financial performance as dependent variables and independent variables comprising of Tax incentives, Liquidity incentives, growth incentives and visibility incentives.

3.9.5.2 Correlation Analysis

The first test to be conducted was the correlation analysis test that was used to determine the level of association of two variables (Levin & Rubin, 1998). This analysis is the initial step in statistical modeling to determine the relationship between the dependent and independent variables. Prior to carrying out a multiple regression analysis, a correlation matrix was developed to analyze the relationships between the independent variables as this assisted in developing a prediction multiple model. Correlation analysis helped to detect any chance of multicollinearity. A correlation of ±1.0 means there is a perfect positive or negative relationship (Hair *et al*., 2010). The values are interpreted between 0 (no relationship) and 1.0 (perfect relationship). The relationship is considered small when r = ±0.1 to ±0.29, while the relationship is considered medium when r = ±0.3 to ±0.49, and when r= ±0.5 and above, the relationship is considered strong.

3.10 Data Presentation

The data was tabulated and classified accordingly in line with the objectives of the study. The coded, tabulated and classified data was subjected to both quantitative and qualitative analysis. Quantitative data analysis was helpful in data evaluation because it provides quantifiable and easy to understand the result. Quantitative data can be analyzed in a variety of different ways, which can help the researcher to meet his set objectives with much ease (Kombo & Tromp, 2006). Quantitative data was presented through statistical techniques such as pie charts, tables and bar charts.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings through data analysis and presentation of the research findings. Section 4.1 introduces the chapter, section 4.2 presents the results for respondents' background information, and section 4.3 presents Results of Diagnostic and Substantive Tests, section 4.4 presents the Results on Distribution of Incentives, section 4.5 presents the Results of Incentives' Effect on Stock Market Perfomance and section 4.6 presents the chapter summary. The data is presented in the form of tables, frequencies percentages, graphs, scatter diagrams and pie charts in line with research design and objectives.

4.2 Results on the Background Information of Respondents

This section presents the results of the background information of respondents. Subsection Section 4.2.1 presents the results for response rate, subsection 4.2.2 presents results for the gender of respondents, subsection 4.2.3 presents results for the educational levels of respondents, subsection 4.2.4 presents results for the age of respondents, subsection 4.2.5 presents results for the duration of stay in current department while subsection 4.2.6 presents results for the duration of service in current position.

4.2.1 Results for Response Rate

The information from table 4.1 shows a response rate of 84.66%. This implies that out of the 150 expected respondents, there were 127 actual respondents. This response rate is good and perfect as seconded by Mugenda and Mugenda (2013), who argues that a response rate of 60% is good and one which is above 70% is perfect. Since the response rate is 84.66%, which can be concluded to be excellent

representation. The Table 4.1 shows the output for the response rate as explained above:

Table 4.1 : Results for Response Rate

Population	Frequency	Percentage
Returned	127	84.66%
Not Returned	23	15.34%
TOTAL	150	100%

4.2.2 Results for Gender of Respondents

The study findings in Figure 4.1 indicates on the gender of respondents indicates that male respondents were slightly more that the female respondents by 14%. The gender information above imply that both gender were well represented in this study and thus the study findings cannot be prejudiced or attributed to any unique type of gender but both. The findings on the gender of respondents is represented by the Figure 4.1:

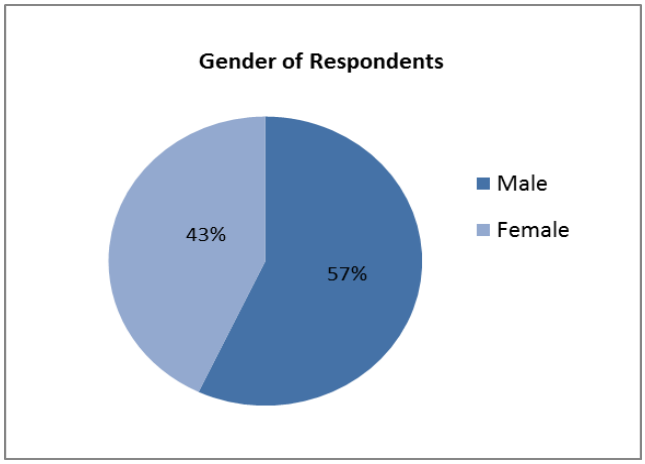


Figure 4.1: Results for Gender of Respondents

4.2.3 Results for Educational Levels of Respondents

The results on educational levels of respondents reveal that 46% of the respondents were first degree holders followed by 29% who were master's degree holders and 12% who were diploma holders. CPA holders were 7%. This information is critical as it informs this study that the respondents who were picked for this study were well qualified to act as representational figures for this study.

The above discussed findings are shown in Figure 4.2:

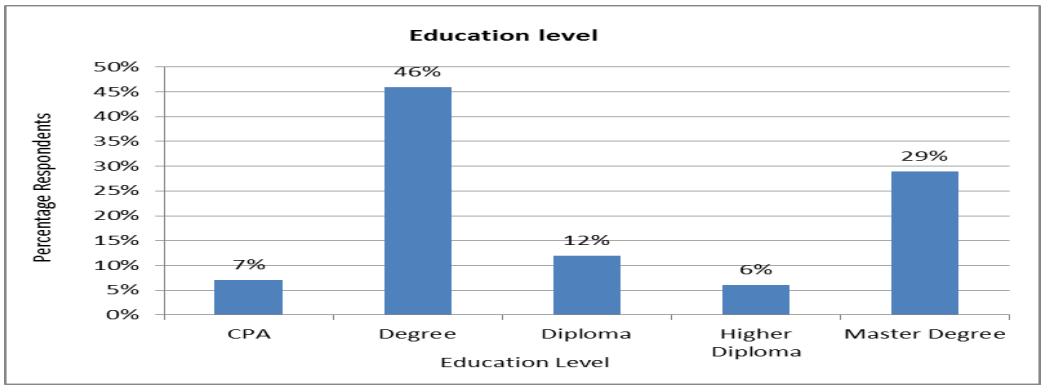


Figure 4.2: Results for Education Levels of Respondents

4.2.4 Results on the Age of Respondents

The general samples of the employees in the assessed organizations were fairly young with an average age of 32 years. Majority of the respondents were between 31-35 years. About 29% of the employees in the surveyed organizations were between 36-40 years with greater than 41 years being the least. Information on the age of respondents indicates that all age groups were well represented for this study as the study wasn't biased to any single age group and hence the opinion of respondents was representative. The findings are hereby illustrated in Figure 4.3:

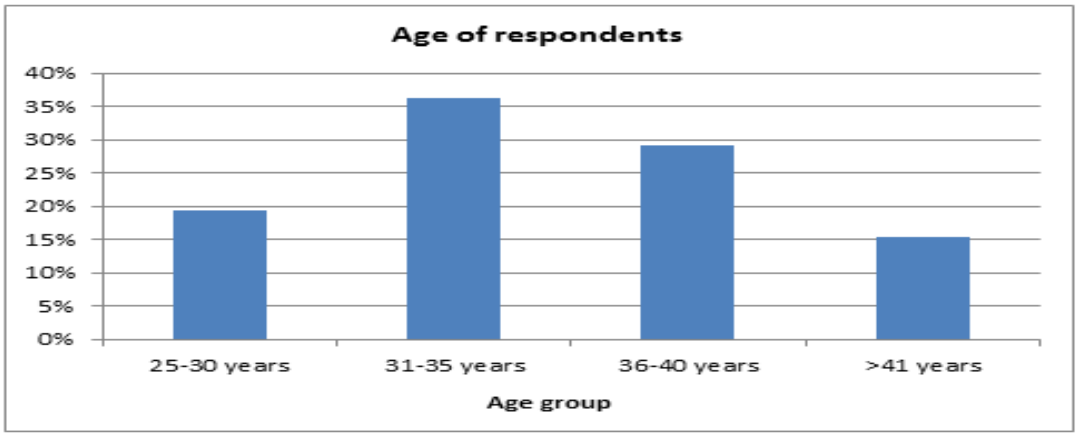


Figure 4.3: Results on the Age of Respondents

4.2.5 Results on Duration of Stay in Current Department

The findings reveals that a majority of respondents i.e. 33.9% (n=43) had worked for 3 years in their current department, 24.4% (n=31) had worked for 1 year, 17.3% (n=22) had worked for 2 years, 14.2% (n=18) had worked for 5 and more years while only 7.8% (n=10) had worked for 4 years. This information implies that majority respondents had served in their current department for a good time and thus were well abreast with their departmental requirements and operations and thus their experience would provide a good sense of information relevant for this study.

The findings are as shown in Table 4.2:

Table 4.2: Results on Duration in Current Department

Department	Duration					Total
	1 year	2 year	3 year	4 year	>=5 years	
Administration	13	8	13	2	5	42
Finance	9	2	12	2	4	29
IT	3	1	1	1	2	9
Sales & Marketing	6	11	17	4	8	47
Total	31	22	43	10	18	127

4.2.6 Results on Duration of Service in Current Position

The study findings on the duration of respondents' service in the current position shows that majority respondents (25.2%) had served in their current position for 4 years followed by 21.3% who had served in their current position for 3 years, 20.5% who had served in their current position for 1 and 2 years respectively and finally 18.1% who had served for over 5 years. This information as provided by the table 4.3 below indicates that the respondents were in a good position to effectively answer the research questions as supported by their working experience in the current positions. The above information is shown in Table 4.3:

Table 4.3 : Results on Duration of Service in Current Position

Gender	Duration					Total
	1 year	2 year	3 year	4 year	>=5 years	
Female	12	10	13	18	7	51
Male	14	18	14	14	16	76
Total	26	26	27	32	23	127

4.3 Results of Diagnostic and Substantive Tests

This section describes the inferential statistics inherent in this research. This comprised of diagnostic tests such as normality tests, reliability tests, T-tests, Anova, and K-density distributions of stock market incentives as well as substantive tests such as regression and correlation analysis.

4.3.1 Diagnostic Test Results

4.3.1.1 Results for Normality Tests (Shapiro-Wilk Test)

Normality of the variables was examined using the skewness and kurtosis. From the table below, the variables can be assumed to be univariate normal since the skewness statistic was 0.07 which is within the interval (-3.0, 3.0) and the kurtosis statistic was -1.06 lying in the interval (-10.0, 10.0). The summary results are as shown in the Table 4.4:

Table 4.4 : Results for Shapiro-Wilk Test on Market Capitalization

	Kolmongrov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Data	0.137	126	0.200a	0.946	20	0.316

The K-density curve below shows how the data was normally distributed.Figure 4.4 reveals that stock market and incentives were significantly correlated

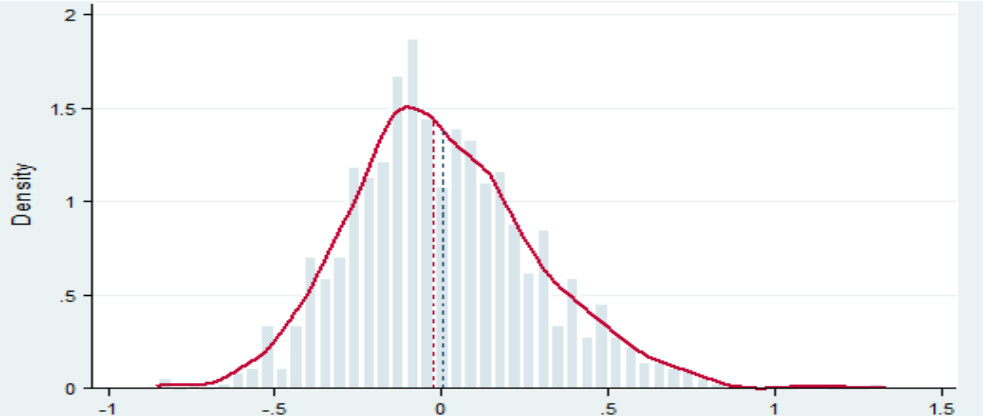


Figure 4.4: Results on Stock Market Distributions

4.3.1.2 Results for Reliability Tests

The Cronbach's alpha test was computed to determine the reliability of the study. The Table 4.5 illustrates the reliability values for the data collection instrument (questionnaire):

Table 4.5 : Cronbach's Alpha Reliability Findings

Variables	Cronbach's
Tax Incentives	0.701
Liquidity Incentives	0.769
Growth Incentives	0. 731
Visibility Incentives	0.720

The average Cronbach's apha value was 0.73025 indicating that the data collection instruments were reliable as the value exceeds 0.7 as per the minimax rule (Cronbach, 1951).

4.3.1.3 Results for Hausman Test

Hausman test was conducted to test whether to estimate a fixed effects model or a random effects modelsince data the study made use of panel data which comprise of both cross section and time series data. The hypothesis to be tested was that the preferred model isfixed effects verses the alternative, the random effects. This was done using e-views and from the findings, the chi square statistic value was 3.2267 with Chi square df of 3 and probability of 0.26543 which indicates that the prefered model should be the random effects model as illustrated in the Table 4.6:

Table 4.6 : Results on Correlated Cross-Section Random Effects Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.2267	3	0.26543

4.3.1.4 Findings on Autocorrelation Tests

This study employed autocorrelation analysis using stock market index, market capitalization and stock market turnover as proxies for the dependent variable, stock market's financial performance. The Dubin Watson's 1950, 1951 statistic test was applied to test for serial correlation presence or absence. Since d is approximately equal to $2(1 - r)$, where r is the sample autocorrelation of the residuals, (Durbin & Watson, 1951), $d = 2$ indicates no autocorrelation. The value of d always lies between 0 and 4. If the Durbin–Watson statistic is substantially less than 2, there is evidence of positive serial correlation. As a rough rule of thumb, if Durbin–Watson is less than 1.0, there may be cause for alarm. The preferred Durbin-Watson statistic is within the interval ($1.5<d<2.5$) (Durbin & Watson, 1971). Any value below 1.5 implies positive autocorrelation and values above 2.5 also indicate negative

autocorrelation which in regressions can imply an underestimation of the level of statistical significancen (Durbin & Watson, 1951).

4.3.1.4.1 Results for Autocorrelation Test on Stock Market Index

The test's aim was to find out if stock market index depends on the initial or previous year value. The table 4.13 below provides the multiple linear regression model summary and overall fit statistics. The Durbin-Watson statistic was 2 081 which was within 1.5<d<2.5, and hence the absence of both negative and positive serial correlation. The results are as shown in the Table 4.7:

Table 4.7 : Results for Autocorrelation pn Stock Market Index

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.233[a]	.054	.064	3871.9148970	2.081

4.3.1.4.2 Results for Autocorrelation Test on Market Capitalization

The Durbin-Watson statistic was 2.021 which still was within 1.5<d<2.5, and hence the absence of both negative and positive serial correlation. Results of the model summary of autocorrelation test on stock market turnover ratio were as shown in the Table 4.8:

Table 4.8 : Results for Autocorrelation on Market Capitalization

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.067[a]	.065	.092	1.9956685	2.021

4.3.1.4.3 Results for Autocorrelation test on Stock Market Turnover

The test results for the Durbin-Watson statistic was 2.046 which was within 1.5<d<2.5and hence the absence of both negative and positive serial correlation. Results of the model summary of autocorrelation test on stock market turnover ratio are as shown in the Table 4.9:

Table 4.9 : Results for Autocorrelation on Stock Market Turnover

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.049[a]	.055	.073	0.6238741	2.046

4.3.1.5 Results for Multicollinearity Tests

This study employed multicollinearity test analysis using stock market index, market capitalization and stock market turnover as proxy for the stock market's financial performance as dependent variables and independent variables comprising of tax incentives, liquidity incentives, growth incentives and visibility incentives. The VIF values were determined to detect whether the correlation could be problematic or not. As per the rule, if the VIF is equal to 1, then there is no multicollinearity among factors, but if the VIF is greater than 1, the predictors may be moderately correlated. Outputs of VIF values within the range of 1.5 indicate some correlation, but not enough to be overly concerned about. A VIF between 5 and 10 indicates high correlation that may be problematic. And if the VIF goes above 10, it can be assumed that the regression coefficients are poorly estimated due to multicollinearity.

4.3.1.5.1 Results for Multicollinearity Test on Stock Market Index

The test established that only tax incentives, liquidity incentives and growth incentives were significant predictors. The test results for mutlicollinearity on stock market index were as follows:

Table 4.10 : Results for Multicollinearity on Stock Market Index

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Constant	934.67	732.495		1.276	0.214		
Tax incentives	0.229	7.304	0.006	0.031	0.975	0.991	1.009
Liquidity incentives	3.01	9.198	0.066	0.327	0.746	0.976	1.025
growth incentives	8.12	7.018	0.234	1.157	0.259	0.967	1.034
visibility incentives	1677	3898		0.430	0.668		

The output above for this study shows that the VIF for the publication and years factors are within the range of 1.5, which indicates some correlation, but not enough to be overly concerned about. A VIF between 5 and 10 indicates high correlation that may be problematic. And if the VIF goes above 10, you can assume that the regression coefficients are poorly estimated due to multicollinearity.

4.3.1.5.2 Results for Multicollinearity Test on Market Capitalization

As for the test multicollinearity on market capitalization, the output below shows that the VIF for the publication and years factors are still within the range of 1.5, which indicates some correlation, but not enough to be overly concerned about. The results are shown in the Table 4.11:

Table 4.11 : Results for Multicollinearity Test on Market Capitalization

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.293	1.944		1.694	0.108		
	Visibility incentives	0.007	0.03	1.076	0.233	0.567	0.231	1.051
	Liquidity incentives	-0.015	0.238	-0.038	-0.064	0.95	0.912	1.035
	Tax incentives	0.149	0.178	0.537	0.836	0.414	0.131	1.099
	growth incentives	0.149	-0.25	-0.205	-0.596	0.414	0.701	1.031

4.3.1.5.3 Results for Multicollinearity Test on Stock Market Turnover Ratio

The multicollinearity test on stock market turnover ratio, the average VIF was 1.255 with the VIF values ranging between 1.002 and 1.265 which indicates the values slightly above 1 but within the range of 1.5. This implies that the predictors could be moderately correlated and since they did not have very high VIFs ranging between 5 and 10, and thus there were no indicators for worry that the correlation could be problematic. The output results are shown in the Table 4.12:

Table 4.12 : Results for Multicollinearity Test on Market Turnover

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
Constant	4.163	2.675		1.556	0.423		
Visibility incentives	1.745	1.654	0.643	1.055	0.235	0.0121	1.002
Liquidity incentives	0.789	0.863	0.432	0.091	0.012	0.234	1.321
Tax incentives	0.586	1.643	1.653	0.543	0.357	0.543	1.432
growth incentives	0.332	-0.532	0.567	0.624	0.567	0.879	1.265

4.3.2 Substantive Tests

4.3.2.1 Findings on Regression Analysis Tests

In order to estimate the relationships among variables, both simple regression and multiple regression analysis were deployed to help understand how the typical value of the dependent variable (stock markert performance) changes when any one of the independent variables is varied, while the other independent variables are held fixed.

4.3.2.1.1 Regression Results of Tax Incentives on Stock Market Performance

Simple regression analysis was used to determine the systematical connection by a linear relationship of tax incentives and stock market performance using the regression equation $SP= \alpha_0+ \alpha_1 TI + £$.

Table 4.13 : Regression Results of Tax Incentives on Stock Market Perfomance

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.123[a]	0.221	0.121	1.77583

From the model summary table above, the adjusted R^2 (0.121) indicated that almost none of the stock market performance can be explained by tax incentives as the R^2 was negligible. The peason's correlation (R) value was very small (0.123) indicating that there is no strong correlation between Stock market performance and tax incentives.

An analysis of variance (ANOVA) to investigate the significance of the model indicated that the model was insignificant at 5% significance level and thus tax incentives did not have any signifiant effect on the stock market performance as shown in the Table 4.14:

Table 4.14 : Results of ANOVA Test of Tax Incentives on Stock Market Perfomance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.265	1	8.265	6.720	0.1094a
Residual	153.808	125	1.230		
Total	162.073	126			

From the regression coefficients above, the table clearly shows that the regression slope was close to zero (0.211) indicating that tax incentives were poor predictors of stock market performance. The regression coefficients gave the model:

Table 4.15 : Regression Coefficients Results of Tax Incentives on Stock Market Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	2.131	0.781		2.729	0.063
Tax incentives	-0.211	0.102	-0.234	-2.068	0.791

a. Predictors: (Constant), Tax.Incentives (centred)

4.3.2.1.2 Regression Results of Liquidity Incentives on Stock Market Performance

The analysis on liquidity incentives on stock market performance showed that the R, which is the correlation coeffiecient, was positive (0.617). This implies that with the increase of liquidity incentives, that accelerated stock market perfomance and hence liquidity incentives were a motivator for investors at NSE. The propotion of Stock market performance that is explained by liquidity incentives was 43.7% (R^2) and the adjusted R^2 (0.278) indicated that about 27.8% of the stock market performance could be explained by liquidity incentives. The variability of actual stock performance value was 3.9862 (Std. Error of the Estimate) from predicted values. The results are as shown in the Table 4.16:

Table 4.16 : Regression Findings of Liquidity Incentives on Stock Market Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.617[a]	0.437	0.278	3.9862

The ANOVA table presented an F statistics of 5.557 which gives the explanatory power of the model. The p-value (Sig) was 0.008 which is way less than significance of 0.05 (significant), thus there is was realized a strong evidence that liquidity incentives are correlated with stock market performance.

Table 4.17 : ANOVA Results of Liquidity Incentives on Stock Market Performance

	Sum of Square	Df	Mean Square	F	Sig.
Regression	18.265	1	18.265	5.557	0.008[a]
Residual	410.855	125	3.2868		
Total	429.120	126			

a. Predictors: (Constant), Liquidity.Incentives (centred)

b. Dependent Variable: Stock Market Performance

The coefficients of the relationship between liquidity incentives and stock market performance was positive as the t-value was 1.438 and a significance of 0.0216. The results were significant hence we can conclude that liquidity incentives enhance stock market performance. The coefficients for beta were positive implying that for one unit increase in liquidity, there was an increase in stock market performance by 2.586 units.

Table 4.18 : Regression Coefficients Results of Liquidity Incentives on Stock Market Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-32.665	9.324		-3.503	0.063
Liquidity incentives	2.586	0.647	0.458	3.997	0.0216

4.3.2.1.3 Regression Results of Growth Incentives on Stock Market Performance

The regression equation to be estimated was :

$SP = \alpha_{30} + \alpha_{31}GI + e_3t$

Table 4.19 : Regression coefficients Results of Growth Incentives on Stock Market Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	46.224	16.458		2.8086	0.034
Growth incentives	-4.430	0.841	-.636	-5.2675	0.216

The coefficients of the relationship between growth incentives and stock market performance was negative as the t-value was -5.2675 and a significance of 0.216. This indicates that growth incentives didn't enhance stock market performance.

Table 4.20 : Regression Results of Growth Incentives on Stock Market Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.287[a]	0.349	0.671	4.882

From the model summary table above, the adjusted R^2 (0.671) indicated that growth incentives insignificantly affected stock market performance. The peason's correlation (R) value was insignificant (0.287^a) thereby implying that the correlation between growth incentives and stock market performance was weak.

Table 4.21 : ANOVA Results of Growth Incentives on Stock Market Performance

ANOVA[b]					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.234	1	11.234	14.5593	0.2371[a]
Residual	96.456	125	0.7716		
Total	107.670	126			

Analysis of variance (ANOVA) investigated on the significance of growth incentives indicates that growth incentives did not predict stock market performance as the significance level was inadequate at 5% significance level (0.2371[a])as shown in the Table 4.21.

4.3.2.1.4 Regression Results of Visibilty Incentives on Stock Market Performance

The analysis showed that the R, which is the correlation coeffiecient, was 0.378 implying that with the increase in visibilty incentives, there was an increase in stock market performance and a decrease in visibilty incentives leads to a decrease in stock market performance. The propotion of stock market performance that is explained by visibilty was 57.9% (R Square) and the adjusted R^2 (0.462) indicated that about 46.2% of the stock market performance could be explianed by visibilty incentives. The variability of actual stock performance values was 5.6673 (Std. Error of the Estimate) from predicted values. The results are as shown in the table 4.22:

Table 4.22 : Regression Results of Visibility Incentives on Stock Market Performance

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.378[a]	0.579	0.462	5.6673

The ANOVA table presented an F statistics of 14.1464 which gives the explanatory power of the model. The p-value (Sig) was 0.026 which was way less thanthe

significance of 0.05 (significant), thus there was a strong evidence that visibilty incentives were correlated with stock market performance.

Table 4.23 : ANOVA Results of Visibility Incentives on Stock Market Performance

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	21.893	1	21.893	14.1464	0.026[a]
Residual	193.456	125	1.5476		
Total	215.349	126			

b. Predictors: (Constant), Growth.Incentives (centred)

b. Dependent Variable: Stock Market Performance

The coefficients of the relationship between visibility incentives and stock market performance was positive as the t-value was 4.887 and a significance of 0.0312. This indicates that visibilty incentives significantly influence the perfomance of NSE. Stock Market performance. The coefficients for beta were positive implying that for one unit increase in visibility incentives, there was an increase in stock market performance by 2.556 units.

Table 4.24 : Regression Coefficients Results of Visibility Incentives on Stock Market Performance

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	-27.874	5.781		-4.826	0.081
Liquidity incentives	2.556	0.523	0.458	4.887	0.0312

4.3.2.1.5 Results on Multiple Regression Coefficients Model

The values for tax incentives, liquidity incentives, growth incentives and visibility incentives were –2.832, 0.629,-0.234 and 3.641 respectively.

From the findings, the absolute t-statistic values for tax incentives and growth incentives were less than 2 indicating insignificance according to the thump rule. However, as for liquidity and visibility incentives, the findings revealed that the t-statistic was greater than 2 in absolute value, the estimate was "statistically significant at the 5 percent level," implying that the true value was unlikely to be zero. This explains that liquidity and growth incentives affects the stock market perfomance.

Table 4.25 : Regression Coefficients Results of Incentives on Stock Market Performance

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.123	1.871		0.600	0.062
Tax incentives	-2.832	1.645	-0.322	-1.722	0.241
Liquidity incentives	0.629	0.171	0.198	3.673	0.014
growth incentives	-0.234	0.147	-0.1431	-1.592	0.531
visibility incentives	3.641	1.228	0.521	2.965	0.012

4.3.2.2 Correlation Matrix Results for Stock Market Perfomance

Determinants of stock market performance were estimated using four incentives: tax incentives, liquidity incentives, growth incentives, and visibility incentives and by use of the stock market performance as the dependent variable. The results suggest that tax and growth incentives and stock market performance were negatively correlated (correlation coefficient is -0.321 and - 0.342). Liquidity and visibility incentives and stock market performance were positively correlated (+0.278 and 0.195), which may depict substitution of the stock market depending on the policies and regulations in place. The summary result is as shown in the Table 4.26:

Table 4.26 : Correlation Matrix Results for Stock Market Performance

Pearson Correlation		Stock market Index				
		Stock market Index	**Tax incentives**	**Liquidity incentives**	**Growth incentives**	**Visibility incentives**
Pearson Correlation	Tax incentives	1	-0.321	0.278	-0.02	
	Liquidity incentives	-0.321	1	0.342	0.151	
	growth incentives	0.278	- 0.342	1	0.195	
	visibility incentives	-0.028	0.151	0.195	1	
	Stock market Index					
Sig. (1-tailed)	Tax incentives	.	0.019	0.037	0.108	0.108
	Liquidity incentives	0.019	0.013	0.013	0.429	.
	growth incentives	0.037	0.17	.	0.17	
	visibility incentives	0.429				
	Stock market Index					
N						

4.3.6.7 Results of ANOVA Model Summary

The analysis showed that the R which is the correlation coeffiecient was positive for liquidity incentives and visibility incentives (0.548^a and 0.114^a) implying that with the increase in liquidity and visibilty incentives,there is an increase in stock market performance and a decrease in liquidity and visibilty incentives leads to a decrease in stock market performance. The propotion of stock market performance that is explained by liquidity incentives was 29.6%and 39.5% (R Square) and the adjusted R^2 (0.345 and 0.231) indicated that about 34.5% and 23.1% of the stock market performance can be explianed by liquidity and visibility .The variability of actual stock performance values was 2.679 and 6.673 for liquidity and visibility respectively (Std. Error of the Estimate) from predicted values. The results are as shown in the Table 4.27:

Table 4.27 : Results of Multiple Regression Summary for ANOVA

	R	R Square	Adjusted R Square	Std. Error of the Estimate
Tax Incentives	- 0.211a	0.186	0.345	2.891
Liquidity Incentives	0.548[a]	0.296	0.345	4.812
Growth Incentives	- 0.345[a]	0.218	0.714	2.679
Visibility Incentives	0.114[a]	0.375	0.231	6.673

4.4 Results on Distribution of Incentives

The table below gives the summary of the findings. The values of skewness were 0.07 on average which was considered ideal since the values are close to 0 and hence symmetrical skewness. Kurtosis gave a value of -1.06 which revealed the existence of a flatter distribution due to the negative kurtosis value.

Table 4.28 : Results on Distribution of Incentives

Data	Mean		Statistic	Std.Error
			18.4719	0.77126
	95% Confidence Interval	Lower Bound	16.8577	
		Upper Bound	20.0862	
	5% Trimmed Mean		18.4986	
	Median		18.3962	
	Variance		11.897	
	Std.Deviation		3.44918	
	Minimum		12.68	
	Maximum		23.8	
	Range		11.14	
	Interquartile Range		6.8	
	Skewness		0.07	0.512
	Kurtosis		-1.06	0.992

4.5 Results of Incentives' Effect on Stock Market Perfomance

This section reviews the effect of tax incentives, liquidity incentives, growth incentives, visibility incentives on stock market perfomance.

4.5.1 Results for Tax Incentives on Stock Market Perfomance

This section reviews tax incentives on perfomance: tax incentives as a gift or a motivator, market capitalization for tax incentives, stock market index for tax incentives and market turnover ratio for tax incentives.

A total of 58% of the respondents argued that tax incentives did not motivate their firms to list at NSE. About 17% of respondents strongly agreed while 23% agreed that their company enjoyed tax incentives before listing at NSE as illustrated in Table 4.29:

Table 4.29 : Results for Effect of Tax Incentives on Stock Market Performance

Effect of Tax Incentives on Stock Market Performance	Ranking				
	Strongly Agree	Agree	Strongly Disagree	Disagree	Neither Agree nor Disagree
Tax Incentives motivated our firm to list at NSE	8%	19%	**15%**	52%	**6%**
Tax incentives are an important variable while making listing decisions at NSE	21%	8%	**56%**	12%	**3%**
Tax reductions and exemptions influence stock market performance	100%	0%	**0%**	0%	**0%**
Our company enjoyed tax incentives before listing at NSE	17%	23%	**29%**	31%	**0%**
Predictable, clear tax laws and transparent tax administration are important than low tax rates when listing in NSE	54.2%	45.8%	**0%**	0%	**0%**

A great number (67% i.e. 52%+ 12%) of respondents were of the disagreement that tax incentives mostly motivated their firms to list at NSE. Only 8% and 6% disagreed and neither agrees nor disagreed respectively. These findings concur with the statement of Klemm (2009) who argued that the reason for the granting of investment incentives is to promote stock market performance through listing.

The study findings also indicate that tax reductions and exemptions influence stock market performance with 100% backing from the respondents. The findings are in line with the findings of IOSCO (2002) whose findings were that incentives are a motivator and result in more trading stock, strengthen investors' confidence and foster participation on the stock markets.

About 17% strongly agreed and 23% agreed that their company enjoyed tax incentives before listing at NSE as illustrated in Table 4.5. A great portion of 31% disagreed with this illusion. The findings reveal that tax incentives are an important variable while making listing decisions at NSE.

Predictable, clear tax laws and transparent tax administration are also important than low tax rates when making listing in NSE with 100% confirming this.This justifies the study of Gale (1996) that although Incentives are provided to motivate investors; for investors, access to domestic markets, a good investment climate, security and stability, skilled labor, and other factors matter mostly.

A great percentage, 55.9 % of the respondents asserted that the tax incentives were a gift and not a motivator to invest in NSE. This shows that tax incentives as per this findings does not affect stock market performance. This can be backed by Figure 4.5:

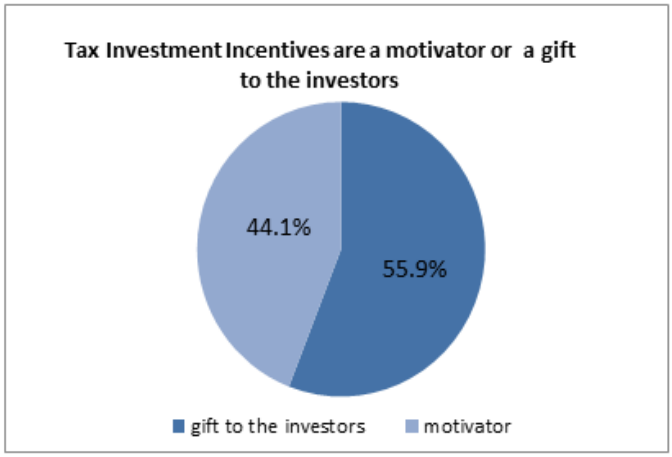


Figure 4.5 : Results for Tax Incentives as a Gift or a Motivator

The findings in figure 4.5 imply that although much tax incentives form a point of reference while making listing decisions at NSE, on the mind of the investors, they remain a symbol of donations and hence they cannot be expected to implore the investors to make list at NSE.

To determine the effect of tax incentives on stock market performance using market capitalization as an indicator for stock market performance, a simple linear regression equation $MC= \alpha_0+ \alpha_1 TI + £$ was done:

From the regression coefficients below, the regression slope was close to zero (0.337) indicating that tax incentives were poor predictors of stock market performance as the market capitalization for the tax incentives was below average.This is simply because the changes in tax incentives did not substantially change the market size for this listed firms leaving the listed firms in an almost unaffected state of market capitalization even after the tax incentives have been ejected to promote investments.

Table 4.30 : Regression coefficients Results of Tax Incentives on Market Capitaliation

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.671	0.822		1.982	0.078
Tax incentives	0.337	0.246	0.179	1.369	0.561

b. Predictors: (Constant), Tax.Incentives (centred)

The stock market index as a measure and variable of stock market performance was used to determine whether tax incentives in deed affects stock market performance. This was done through simple regression equation that was run to determine the outcome for this uncertainity.

It was established that the regression slope was very low (1.178) indicating that changes in tax incentives were insignificant in determining stock market performance. The t-statistic value was 1.368 with 0.434 significance indicating very low returns with the existence of tax incentives which signify non-substantiality.

Table 4.31 : Regression Coefficients Results of Tax Incentives on Stock Market Index

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.541	0.783		4.522	0.125
	Tax incentives	1.178	0.861	0.179	1.368	0.434

a. Predictors: (Constant), Tax.Incentives (centred)

To determine whether tax incentives affects stock market performance using stock market index as the measure of stock market performance, asimple linear regression equation MTR= α_0+ α_1TI + ewas computed:

The a t-statistic value was 1.369 with 0.561 significance indicating that tax incentives were insignificant in determining stock market performance via stock market turnover ratio as the shares traded were illiquid despite the introduction of tax incentives.

Table 4.32 : Regression Coefficients Results of Tax Incentives on Market Turnover Ratio

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	7.429	1.378		5.391	0.345
Tax incentives	-0.194	0.326	0.385	-0.595	0. 891

Predictors: (Constant), Tax.Incentives (centred

4.5.2 Results of the Effect of Liquidity Incentives on Stock Market Perfomance

This section reviews liquidity incentives on perfomance: liquidity incentives as a gift or a motivator, market capitalization for liquidity incentives, stock market index for liquidity incentives and market turnover ratio for liquidity incentives.

From the output results on liqudity incentives as a gift or a motivator, 67.8% of respondents strongly agreed that liquidity incentives motivate firms to list at NSE while 22% agreed. These findings concur with those conducted by Cooray (2003) in Sri Lanka stock markets which also found out that liquidity affects investment decisions. 75.5% respondents reveal that liquidity incentives are important when making listing decisions. 100% respondents revealed that the companies listed at NSE would easily access equity funds than those not listed. 87% of respondents strongly agreed respondents indicated that companies will likely want to be listed at NSE because of liquidity incentives. The above is explained in the Table 4.33:

Table 4.33 : Results for Effect of Liquidity Incentives on Stock Market Performance

Effect of Liquidity Incentives on Stock Market Performance	Ranking				
	Strongly Agree	Agree	Strongly Disagree	Disagree	Neither Agree nor Disagree
Liquidity Incentives motivated our firm to list at NSE	67.8%	22.0%	10.2%	12.0%	0%
Liquidity Incentives effect on stock market performance	51%	1%	51%	23%	19%
Liquidity incentives are important when making listing decisions at NSE	75.5%	7.8%	2.3%	12.4%	2%
Stock market liquidity will not enhance incentives for acquiring information	26.9%	3.0%	4.5%	5.2%	60.4%
Companies listed at NSE would easily access equity financing than their unlisted counterparts	100%	0%	0%	0%	0%
Many companies might want to list a NSE because of the highly liquid market position which enables diversification	87%	2.0%	1%	11%	0%

Interestingly, liquidity incentives were highly ranked (52%) as influencers of stock market performance. These findings were identical to those of Githaiga (2009) who found a positive relationship between incentive and stock market performance

To determine whether liquidity incentives affects stock market performance using market capitalization as the variable for stock market perfomance, a simple linear regression equation $MC= \alpha_0+ \alpha_1 LI + e$ was conducted to give the following output results:

From the regression coefficients, the table below clearly shows that the regression slope was more than zero (1.456) indicating that liquidity incentives were good predictors of market capitalization.The t-statistic value was 4.220 with 0.041 significance indicating that with the introduction of liquidity incentives, that made the size of the listed firms (market capitalization)to rise.

Table 4.34 : Regression Coefficients Results of Liquidity Incentives on Market Capitalization

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	9.284	1.234		7.524	0.023
Liquidity incentives	1.456	0.345	0.421	4.220	0.041

a. Predictors: (Constant), Liquidity.Incentives (centred)

The size of the market rose whenever liquidity incentives were introduced and to decline when these incentives were reduced. Many investors at the stock market tend to make positive listing decisions whenever they believe that the stocks they deal with are highly liquid and hence they can diversify both in the short-run, as it is in the long-run.

To determine whether liquidity incentives affects stock market performance using market stock market index as the variable for stock market perfomance, a simple linear regression equation SMI= α_0+ α_1LI + e was conducted to give the following output results:

The regression slope was (2.617) with a t-statistic value of 2.456 and 0.044 significance indicating significance of liquidity incentives as predictors of stock market performance.

Table 4.35 : Regression Coefficients Results of Liquidity Incentives on Stock Market Index

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.349	0.236		9.953	0.346
	Tax incentives	2.617	0.567	0.179	4.615	0.044

a. Predictors: (Constant), Liquidity.Incentives (centred)

To determine whether liquidity incentives affects stock market performance using market turnover ratio as the variable for stock market perfomance, a simple linear regression equation MTR= α_0+ α_1LI + e was run to give the following results:

From the regression coefficients below, the table clearly shows that the regression slope was more than zero (1.530) indicating that liquidity incentives were good predictors of stock market performance. The market returns were influenced greatly by the liquidity incentives as they increased significantly upon introduction of these incentives.

Table 4.36 : Regression Coefficients Results of Liquidity Incentives on Market Turnover Ratio

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.667	0.992		4.7046	0.009
	Tax incentives	1.530	0.561	0. 482	2.727	0.012

Predictors: (Constant), Liquidity.Incentives (centred

4.5.3 Results of Growth Incentives on Stock Market Perfomance

This section reviews growth incentives on perfomance: growth incentives as a gift or a motivator, market capitalization for growth incentives, stock market index for growth incentives and market turnover ratio for growth incentives.

A majority (59.5%) of respondents stronly agreed that being listed at NSE results in an increase in firms' stock equity. A total of 67% of respondents argued that being listed at NSE alone doesn't result in an increase in total firms' assets. A total of 89% of respondents argued that growth incentives are a gift and not a motivator when making investment incentives at NSE. The above is explained in Table 4.6:

Table 4.37 : Results for Effect of Growth Incentives on Stock Market Performance

Effect of Growth Incentives on Stock Market Performance	Ranking				
	Strongly Agree	Agree	Strongly Disagree	Disagree	Neither Agree nor Disagree
Being listed at NSE results in an increase in firm's stock equity	59.5%	12.0%	10.4%	18.1%	0%
Being listed at NSE results in an increase in total firm's assets	13%	19%	16%	51%	1%
Going Public provides your firm with equity financing opportunities to grow your business	75.5%	7.8%	2.3%	12.4%	2%
The issuance of Public shares will expand your Investor base and helps set stage for secondary equity financing including private placements	48.7%	13%	5%	18.3%	15%
By virtue of being listed and subject to more scrutiny and exposure, a company raises its profile	100%	0%	0%	0%	0%
Stock markets promote growth opportunities to the listed firms	100%	0%	0%	0%	0%
Growth incentives provided by NSE do not affect stock market performance	87%	2.0%	1%	11%	0%

By virtual of being listed and subject to more scrutiny and exposure, a company raises its performance. Also, the study found out that stock markets promote growth opportunities on the part of listed. This findings are in line with the major findings of IOSCO (2002) which concluded that incentives result in more trading stock, strengthen investor confidence and foster participation among listed firms.

However, being listed at NSE alone doesn't result in an increase in total firms' assets (51% of respondents strongly argued) since the listing thing is not magical, firms must work to grow their assets individually. Also, growth incentives were concluded not affecting stock market performance by a majority of respondents. These findings were similar to those of Easson and Zolt (2002) who argued that tax incentives are both bad in theory and bad in practice in developing countries since they distort investment decisions. They are prone to corruption and thus their objectives are hard to meet.

To check whether a linear relationship exists between growth incentives and market capitalization as a variable of measuring stock market performance, a simple linear regression equation $MC= \alpha_0+ \alpha_1 GI + e$ was conducted. From the regression

coefficients,the regression slope was close to zero (0.337).The t-statistic value was 1.369 with 0.561. The market capitalization was thus realized to be low whenever growth incentives were introduced, an indicator that growth incentives did not substantially influence stock market performance.

Table 4.38 : Regression Coefficients Results of Growth Incentives on Market Capitalization

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.671	0.822		1.982	0.078
Tax incentives	0.337	0.246	0.179	1.369	0.561

a. Predictors: (Constant), Growth.Incentives (centred)

In an attempt to determine the effect of growth incentives on stock market index so as to determine whether growth incentives in deed affects performance of the stock market, a simple regression was conducted.

From the results, the regression slope was very low (-2.456). The absolute value of t-statistic value was 1.675 with 0.234 significance indicating that growth incentives were insignificant in determining stock market performance as the stock returns did not vary significantly whenever the growth incentives were availed.

Table 4.39 : Regression Coefficients Results of Growth Incentives on Stock Market Index

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	5.671	1.003		5.654	0.357
Growth incentives	-2.456	1.466	0.342	1.675	0.234

a. Predictors: (Constant), Growth.Incentives (centred)

To test whether a linear relationship exists between growth incentives and market turnover ratio, in an attempt to determine the relationship between growth incentives and stock market performance, a simple linear regression equation MTR= α_0+ α_1GI + e was conducted.

The regression slope was 1.776 indicating that Growth incentives were poor predictors of stock market performance.The t-statistic value was 3.787 with 0. 355 significance indicating that the shares exchanged just a few hands and hence were not highly liquid implying low perfomance of the stock market as per the effect of growth incentives.

Table 4.40 : Regression Coefficients Results of Growth Incentives on Market Turnover Ratio

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.345	1.110		9.320	0.112
growth incentives	1.776	0.469	0.882	3.787	0.355

Predictors: (Constant), growth.Incentives (centred)

4.5.4 Results of Visibility Incentives on Stock Market Perfomance

This section reviews visibility incentives on perfomance: visibility incentives as a gift or a motivator, market capitalization for visibility incentives, stock market index for visibility incentives and market turnover ratio for visibility incentives.

On the relationship between visibility incentives and stock market performance as a gift or a motivator, 36% of respondents argued that firms listed at NSE were not more competitive than those not listed. 60% respondents argued that listing at NSE provides good public image which helps promote firm performance. 58.7% of respondents' further argued that the market value of public companies is much higher than that of private companies with same structure and in the same industry. 76% of the respondents agreed that publicly filed documents by listed firms at NSE help promote listed companies' visibility and hence their performance. These

findings were in line with those of Glen (1994) who found out that publicly listed companies are subject to rules of securities commission and stock exchanges' self-regulatory rules that provides investors with confidence. Visibility incentives were perceived as gifts and not motivators on the part of investors when making listing decisions.

A great percentage (93%) of respondents asserted that raising capital through IPOs raises the companies' profile, perceived competition and stability. 99.2% of the respondents believed that listed firms are a safer credit risk. These findings were similar to those by Mutua (2011) whose study findings concluded that being listed enhances opportunities for favourable terms both on the part of lenders and the suppliers.

Penultimate, firm stories at NSE were viewed as having helped provide more visibility and hence performance as backed by 77% respondents. 99.3% respondents argued that media coverage of listed firms at NSE helps promote the listed companies' visibility and hence their performance. These findings were similar to those of Donna (2013) who found out that a publicly listed company always receives more publicity and media attention than a private enterprise. The above is explained in Table 4.41:

Table 4.41 : Results for Effetc of Visibility Incentives on Stock Market Performance

Effect of Visibility Incentives and Stock Market Performance	Ranking				
	Strongly Agree	Agree	Strongly Disagree	Disagree	Neither Agree nor Disagree
NSE firms are more competitive than a non-listed one	16%	9.0%	36%	28%	11%
NSE Visibility incentives are a gift and not a motivator	73%	10%	5.5%	4.5%	7%
NSE listing provides a good public image which helps promote firm Performance	60%	35.1%	1.9%	3%	0%
The market value of a public company is much higher compared to a private company with the same structure in the same industry	58.7%	23%	5%	8.3%	5%
Publicly filed documents by listed firms at NSE help promote their visibility and hence their performance	76%	4%	0%	20%	0%
Raising Capital through an IPO raises a company's profile, perceived competitiveness and stability	0%	93%	0%	4%	3%
A listed firm is perceived by lenders and suppliers as a safer credit risk	99.3%	0%	0%	0.7%	0%
Media Coverage of listed firms at NSE help promote their visibility and hence their performance	100%	0%	0%	0%	0%
Firm Stories at NSE help promote their visibility and hence their performance	77%	2.0%	10%	11%	0%

To determine whether visibility incentives affects stock market perfomance using market capitalization as a variable for stock performance, a simple linear regression equation $MC= \alpha_0+ \alpha_1 VI + e$ was conducted:

From the regression coefficients below, the regression slope was more than zero (2.369) indicating ssignificance in the model which implies that visibility incentives did affect stock market performance thereby resulting to high market capitalization whenever theywere introduced. The t-statistic value was 2.647 with 0.011 significance as shown in Table 4.42:

Table 4.42 : Regression Coefficients Results of Visibility Incentives on Market Capitalization

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	7.447	0.821		9.071	0.024
Visibility incentives	2.369	0.895	0.421	2.647	0.011

a. Predictors: (Constant), visibility.Incentives (centred)

The study conducted a simple regression to determine whether visibility incentives did affect stock market performance using the stock market index variable as a measure of stock market performance.

The regression slope was (4.332) indicating that visibility incentives were good predictors of stock market performance as high returns were exhibited with the incorporation of visibility incentives and low returns when those incentives were non existent.

Table 4.43 : Regression Coefficients Results of Visibility Incentives on Market Capitalization

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.332	0.856		5.061	0.022
Tax incentives	2.431	0.665	0.243	3.656	0.016

a. Predictors: (Constant), Visibility.Incentives (centred)

The study conducted a simple regression to determine whether visibility incentives did affect stock market performance using the market turrnover ratio variable as a measure of stock market performance. The simple linear regression equation MTR= $\alpha_0 + \alpha_1 LI + e$ was determined.

From the regression coefficients, the findings clearly shows that the regression slope was more than zero (3.785), with the t-statistic value of 2.643 and 0. 034 significance indicating that visibility incentives were good predictors of stock market performance as more shares were traded with the existence of visibility incentives.

Table 4.44 : Regression Coefficients Results of Visibility Incentives on Market Turnover Ratio

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	6.877	0.579		11.877	0.002
Visibility incentives	3.785	1.432	0. 751	2.643	0. 034

Predictors: (Constant), Visibility.Incentives (centred)

4.5.5 Findings on Combined Effects of Incentives, Investors' Perceptions and Stock Market Perfomance

On the relationship between investors' perceptions and stock market performance, the study found out that a majority of investors did not use neither fundamental nor technical analysis while investing at NSE. These findings opposed those of Tripathi (2008) who found out from the perspective of the Indian stock market that Investors use both fundamental as well as technical analysis while investing. Tripathi (2008)'s respondents strongly agreed that various company fundamentals significantly influence stock prices in India.

Majority (41%) of the respondents argued that NSE investors were overconfident of their trading and investment decisions. These findings were similar to the findings of Alrabadi et al. (2011) whose study on the Jordanian stock market revealed that with time-tested strategies investors get overconfident and their experience with these strategies always increases their confidence.

Majority (78.4%) of respondents argued that the investors at NSE tend to imitate the trading patterns of previous gainers even without any additional analysis of the

market. This clearly depicts that the herding behaviour is real amongst investors in NSE. The researcher's findings can be supported byIppolito (1992) who stated that investors will be ready to invest in those fund or schemes which have resulted in good rewards and most investors' are attracted by those funds or schemes that are performing better over the worst.

Investors at NSE were seen to tend towards holding on to losing stocks for too long and selling the winning stocks too soon, 49% of respondents who were the majority revealed this. This was different to the argument of Mokua (2003) who on the study of NSE argued that the most logical course of action would be to hold on to winning stocks in order to further gains and to sell losing stocks in order to prevent escalating losses (Mokua, 2003).

It was noted that stock market performance is affected more by investors' perceptions than the individual incentives given. These findings are in line with those of Tripathi (2008) who concluded that investors' perceptions influence stock market performance more than incentives; Abdelkarim et al. (2009) who concluded that investors' perceptions were more important determinants of stock market perfomance than incentives in the Palestinian stock exchange and Hussain and Nasrin (2012) who found out that perceptions influence stock market performance. However, the findings oppose the IOSCO (2002) report which argued from the point of view that incentives are a motivator and result in more trading stock, strengthen investors' confidence and foster participation. The above is illustrated in Table 4.45:

Table 4.45 : Results of Investors' Perceptions on Stock Performance

Investors' Perceptions and Stock Market Performance	Ranking				
	Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**
Majority investors use both fundamental and technical analysis while investing at NSE	21%	17%	**0%**	59%	**3%**
NSE Investors are Over Confident of their trading skills and investment decisions	41%	30%	**9%**	20%	**0%**
Investors at NSE tend to imitate the trading patterns of previous gainers even without any additional analysis of the market	100%	0%	**0%**	0%	**0%**
NSE investors fear the loss more than the gain	78.4%	13%	**4%**	4.6%	**0%**
Investors at NSE tend to hold on to losing stocks for too long and sell winning stocks too soon	49%	14%	**8%**	29%	**0%**
NSE Performance is affected more by Investors' Perceptions than the investment Incentives given	100%	0%	0%	0%	**0%**

To test for the moderating effect of investors' perceptions, the regression effect for step one was given by:

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$

The moderating effect equation was as follows:

Step 1:

$Y=\beta_o+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+ \beta_5Z_i$

Step 2

$Y=\beta_o+\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+ Z_i (\beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4)$

Where;

X_1= Tax Incentives

X_2= Liquidity Incentives

X_3= Growth Incentives

X_4= Visibility Incentives

Z_i= Moderator effect (investors' perception)

The Model Summary table provides the change in R^2 measure (within the "Change Statistics" columns for "Model 2"), which was used to determine the statistical significance of the interaction term and, subsequently, whether investors perception moderates the effect of incentives on stock market performance, as shown in Table 4.46:

Table 4.46 : Moderation Effect Model Summary

						Change Statistics			
Model	**R**	**R Squared**	**Adjusted R Square**	**Std.Error of Estimate**	**R Squared Change**	**F Change**	**df1**	**df2**	**Sig.F Change**
1	0.658[a]	0.7231	0.7728	11.234	0.07934	102.234	4	127	0.003
2	0.7881[b]	0.8945	0.9123	9.345	0.0545	98.235	3	126	0.001

R Square Change shows the increase in variation explained by the interaction term (i.e., the change in R^2). The change in R^2 is 5.75% (i.e 0.0575), which is the percentage increase in the variation explained by the addition of the interaction term (investors perception).The increase is statistically significant ($p < .001$), as shown in "Sig. F Change" column. The R^2 change associated with the interaction term shows the interaction between Investors perception and incentives explained an additional 6% of the variance of stock market performance scores over and above the 8% explained by the first order.

Table 4.47 : Moderation Coefficients of Investors' Perception on Performance

Model		Unstandardized Coefficients		T	Sig.	95% Confidence Interval for B	
		Beta	Std.Error			Lower Bound	Upper bound
	(Constant)	55.234	37.675	1.466	0.002	33.341	41.234
1	Tax Incentive	1.234	33.237	0.037	0.21	4.378	5.345
	Liquidity Incentives	32.456	10.567	3.071	0.023	22.901	27.234
	Growth Incentives	24.234	8.467	1.675	0.103	11.235	12.234
	Visibility Incentives	17.28	2.345	7.369	0.019	16.492	16.562
	Investors perception (z score)	10.342	4.234	2.443	0.021	3.234	3.345
2	(Constant)	71.134	42.345	1.680	0.041	37.93	38.348
	Tax Incentive	11.882	27.234	0.436	0.231	0.012	0.1236
	Liquidity Incentives	22.234	7.235	3.073	0.011	9.232	11.234
	Growth Incentives	2.345	1.876	1.250	2.345	2.3561	2.456
	Visibility Incentives	24.357	9.234	2.638	1.234	23.345	24.358
	TI x LI x GI x VI x IP (z score)	28.123	13.234	2.125	0.001	0.087	0.0866

Descriptive statistics verify that the incentive variable was coded correctly and that the obtained descriptive statistics to verify that the incentive variable had a mean of 0 and a standard deviation of 2.03. Also, correlations among all variables to make sure that, as a result of standardizing continuous variables, the interaction term and its components were not too highly correlated. Looking at the output, tax incentives and Growth incentives were not significant i.e. t values were 0.037 and 1.675 respectively. On the other hand, the t value for liquidity, visibility and the interaction terms are more than two, hence significant. The unstandardized regression coefficient for investors perception was 0.021, meaning that there was a significant positive relation between investor's perception and incentives in the sample. The interaction term was .001. In other words, the interaction between investors' perception and incentives was explained in the model effects of incentives alone. The Z score statistics value was close to 1 indicating that there is a positive relationship between stock performance and investors' perception. The model was given by:

STP = 61.234+ (10.982x Tax Incentives) + (11.234 x Liquidity Incentives) + (3.568 x Growth Incentives) + (24.357 x Visibility Incentives) + (2.123 x TI x LI x GI x VI x IP)

4.6 Chapter Summary

This chapter presented the research findings on the varied components of investment incentives and how they influence stock market performance. The chapter started by presenting background information of the respondents after which the results of diagnostic and substantive tests were presented. The study's diagnostic tests that were conducted and whose results have been presented entail: Hausman's test, Multicollinearity tests, autocorrelation tests, normality tests, reliability tests and ANOVE. The study also carried regression tests, correlation tests as substantive tests in a bid to explain further the study findings.

The chapter also has presented the specific objectives's findings with respect to stock market performance and the moderating effect of investors' perception on stock market performance. The independent sub-variables's results have been presented with respect to their respective dependent sub-variables in determining whether incentives are a gift or a motivator to investors at NSE. The results reveal that liquidity incentives and visibility incentives have a significant effect on stock market perfomance while growth incentives and tax incentives have been proven to be gifts since they don't influence stock market performance significantly. Investors' perceptions has been found to have a significant influence on stock market incentives. The next chapter presents the summary, conclusions and recommendations for this study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter gives the summary of the study findings, relevant conclusions and recommendations for both future studies and policy implications. Section 5.2 describes the summary of the study, section 5.3 explains the study conclusions, and section 5.4 presents the recommendations for further studies under sub-section 5.3.1 and policy recommendations under sub-section 5.3.2. Section 5.5 finally describes the study limitations.

5.2 Summary of the Study

This section presents the summary findings of this study. The summary of findings are arranged according to objectives of the study which entail tax incentives, liquidity incentives, growth incentives and visibility incentives.

5.2.1 Tax Incentives

An exceedingly great number of respondents were of the disagreement that tax incentives mostly motivated their firms to list at NSE. Tax reductions and exemptions were found to have a minimal influence on stock market performance. Many respondents disagreed with this illusion that their firms enjoyed tax incentives before listing at NSE. All respondents argued that predictable, clear tax laws and transparent tax administration were more important than low tax rates when making listing in NSE.

The findings correlate to Gale (1996)'s study that found that, although Incentives are provided to motivate investors; for investors, access to domestic markets, a good investment climate, security and stability, skilled labor, and other factors matter mostly.Many respondents asserted that the tax incentives were a gift and not a motivator to invest in NSE. As much as they serve as a point of reference while

making listing decisions at NSE, they remain a symbol of donations and grants coming to reward investors for listing at NSE.

5.2.2 Liquidity Incentives

A majority of the respondents verified that liquidity incentives mostly motivates firms to list at NSE with about 67.8% strongly agreeing and 22% agreeing. These findings concur with those conducted by Cooray (2003) in Sri Lanka stock markets which also found out that liquidity affects investment decisions. Liquidity incentives were termed as more important when making listing decisions at NSE with a support respondent of 75% strongly agreeing.

It was not clear from among the respondents on whether stock market liquidity enhances incentives for acquiring information (60.4% neither agreeing nor disagreeing). 100% respondents revealed that the companies listed at NSE would easily access equity funds than those not listed. 87% of respondents' further indicated that, companies will most likely want to be listed at NSE because of liquidity incentives.

However, liquidity incentives were highly ranked as factors that affect performance at NSE since every investor is attracted to highly liquid investments which they can switch from time to time unlike investments which have tedious exit barriers. The findings are similar to those of Musyoka (2012) who concluded that incentives are a motivator and not a gift.

5.2.3 Growth Incentives

A majority of the respondents argued that being listed at NSE results in an increase in firms' stock equity. All respondents agreed that by virtual of being listed and subject to more scrutiny and exposure, a company raises its performance. Also, all respondents were of the argument that stock markets promote growth opportunities on the part of listed firms. This findings are in line with the major findings of IOSCO

(2002) report which concluded that incentives are a motivator and result in more trading stock, strengthen investor confidence and foster participation.

On the same note, many respondents argued that being listed at NSE alone doesn't result in an increase in total firms' assets since the listing thing is not magical, firms must work to grow their assets individually. 87% of the respondents asserted that growth incentives are more of a gift than a motivator when making investment incentives at NSE. These findings can be linked to those of Noble and White (2012) who argued that incentives do not often influence stock market performance.

It was established that firms listed at NSE were not more competitive than those not listed. Majority respondents argued that listing at NSE provides good public image which helps promote firm performance. The regression slope for growth incentives was 1.776 indicating that growth incentives were poor predictors of stock market performance. The t-statistic value was 3.787 with 0. 355 significance indicating that the shares exchanged just a few hands and hence were not highly liquid implying low perfomance of the stock market as per the effect of growth incentives. It can therefore be summarized that growth incentives do not substantially affect stock market performance for firms listed at NSE.

5.2.2 Visibility Incentives

Many respondents further argued that the market value of public companies is much higher than that of private companies with same structure and in the same industry. More than three quarters of the respondents believed that publicly filed documents by listed firms at NSE help promote listed companies' visibility and hence their performance. These findings were in line with those of Glen (1994) who found out that publicly listed companies are subject to rules of securities commission and stock exchanges' self-regulatory rules that provides investors with confidence.

Many respondents believed that raising capital through IPOs raises the companies' profile, perceived competition and stability. Listed firms were perceived by lenders

and suppliers as a safer credit risk. These findings were similar to those by Mutua (2011) who concluded that being listed enhances opportunities for favourable terms both on the part of lenders and the suppliers. Firm stories at NSE were viewed as having helped provide more visibility and hence performance. Finally, almost all respondents believed that media coverage of listed firms at NSE helps promote the listed companies' visibility and hence their performance. These findings were similar to those of Donna (2013) who found out that a publicly listed company always receives more publicity and media attention than a private enterprise. Therefore it was summarized that visibility incentives affected NSE performance and were among the most important factors that mesmerized investors to make listing decisions at NSE.

5.3 Conclusion of the study

This section presents the conclusions that were drawn from the study. The conclusions were arranged according to objectives of the study which entail tax incentives, liquidity incentives, growth incentives and visibility incentives.

5.3.1 Tax Incentives

Tax incentives were found to insignificantly affect NSE performance as tax reductions and exemptions were found not to influence stock market performance. Many respondents disagreed with this illusion that their firms enjoyed tax incentives before listing at NSE.

The existence of predictable, clear tax laws and trans-parent tax administration were some of the most important factors identified and that investors take into consideration while listing in NSE as opposed to tax incentives. Also, a good investment climate, security and stability are important for investors to list. Therefore, tax incentives were concluded as not improving NSE performance.

5.2.2 Liquidity Incentives

Liquidity incentives came very strongly as influencers of NSE Perfromance. Many respondents believed that every investor was considerate of his or her ability to switch on or off the market according to the prevailing circumstances and opportunities. Investors prefer the stock market mainly because of its ability to provide highly liquid investments and which can be converted to cash upon demand. However, it was not clear from among the respondents on whether stock market liquidity enhances incentives for acquiring information. Respondents opined the companies listed at NSE would easily access equity funds than those not listed. Respondents further argued that companies could most likely want to be listed at NSE because of liquidity incentives. Thus liquidity incentives are significant in improving the performance of NSE.

5.3.3 Growth Incentives

Respondents agreed that by virtual of being listed and subject to more scrutiny and exposure, a company raises its performance and hence the value of its stock. Contrary to opinion however, many respondents believed that stock market listing is never provoked by the issuance of growth incentives.

Listed firms were viewed to be not more competitive than their unlisted counterparts. However, the market value of publicly listed companies was found to be much higher than that of private companies with the same structure and in similar industry. It was further established that the publicly filed documents provided by listed firms at NSE help promote listed companies' visibility and hence their performance.

Therefore, growth incentives were concluded as not affecting NSE performance and hence are not significant considerations when it comes to ways of improving stock market performance.

5.3.4 Visibility Incentives

The fact that publicly listed companies are subject to rules of securities commission and stock exchanges' self-regulatory rules, that provides investors with confidence. Listed firms were perceived by lenders and suppliers as a safer credit risk. Majority of the respondents believed that the media coverage of listed firms at NSE helped promote the listed companies' visibility and hence their performance. Visibility incentives were therefore identified to influence NSE performance and thus formed among the most important factors of consideration for investors when making listing decisions at the stock market.

NSE investors tended to imitate the trading patterns of previous gainers even without any additional analysis of the market, a mistake that resulted to them holding to losing stocks for too long and selling the winning stocks too soon thereby making losses.

This study acknowledges that investors' emotions as guided by the way they perceive certain investments matters. Investors were ascertained to be normal, acting on their conscious and with limited influence of neither technical nor fundamental analysis. In fact, many investors were identified as over confident of their investments and anchoring to the investments they believe as 'the winning stocks' even when they have emerged as the losing ones. Investor perceptions were therefore concluded as the most important factors that contribute to stock market performance.

5.4 Recommendations for Policy Makers

Having established that tax incentives are a gift and not a motivator, the study recommends to relevant policy makes to withdraw their provision. This will help in saving the tax loses which have been incurred in provision of this incentives and whose impact is futile since it's a white elephant investment.

Liquidity incentives were identified as important factors contributing significantly to stock market performance. The policy makers should capitalize on the provision of

these incentives since they contribute significantly towards improved stock market performance.

Growth incentives also having been identified as a gift and not a motivator, this study recommends that policy makers should cease to invest in them since this investment will be a practical avenue of white elephant errants, investments that cannot resuscitate expectations.

Visibility incentives were identified as a motivator. It was established that visibility incentives on the actual result to higher stock equity because the publicly filed documents provided by listed firms at NSE help promote listed companies' visibility and hence their performance. Policy makers should sensitize investors on the importance of these incentives and continue providing them due to their lucrative contribution towards stock market performance.

Investor perceptions having been found to have a positive moderating effect on stock market performance, policy makers should work their ways to understanding the emotional behavior of investors at NSE. The prospect theory claims that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics. To gain investors' confidence, policy makes should assure them of the possibility to make gains at NSE.

Investors behave as if they would compute a value (utility), based on the potential outcomes and their respective probabilities, and then choose the alternative having a higher utility. The stock market should therefore provide varied options for investors to choose from those investments they perceive as being lucrative and whose overall impact will be to significantly motivate new investors to even make listing decisions and hence increase stock market overall performance.

5.5 Areas for Furthur Research

Research on incentives and stock market performance in developing countries is at its infant stages. While many of these studies have concentrated on only single variables with an isolation of the rest, others have over concentrated on the focus of incentives on foreign direct investment leaving the effect of incentives on stock market performance undone. Even after this study, there still exists gaps in the different methodologies of conducting research on incentives and stock market performance.

In this regard, the researcher recommends an identical study on the effects of incentives on performance of stock markets using time series models such the autoregressive conditional heteroscedasticity (ARCH) models, with its extension to generalized autoregressive conditional heteroscedasticity (GARCH) models as introduced by Engle (1982) and Bollerslev (1986) respectively which accommodate the dynamics of conditional heteroscedasticity (the changing variance nature of the data) to validate this study.

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APPENDICIES

Appendix I: Questionnaire

Section I: Background Information

A. Name of Organization:_____

B. Education Background:_____

C. Gender □Male □Female

D. Age; □25-30yrs □31-35yrs □36-40yrs □Above 41yrs

E. Which department do you represent?

□Sales & Marketing □Finance □Administration □ IT

F. How long have you served in your current organization?

□ 1yr □ 2yrs □ 3yrs □ above 5yrs

G. How long have you served in your current position?

□ 1yr □ 2yrs □ 3yrs □ above 5yrs

Section II:

A. Relationship Between Tax Incentives and Stock Market Performance

For this section, use a likert Scale ranging from 1 to 5 (Where 1- strongly agree, 2-Agree, 3-Strongly disagree, 4-Disagree, 5-Neither Agree nor Disagree)

		1	2	3	4	5
		Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**
1	Tax Incentives motivated our firm to list at NSE					
2	Tax reductions and exemptions are the main influencers of stock market Performance					
3	Our company enjoyed Tax Incentives before listing at NSE					
4	Tax Incentives are an important variable while making listing decisions at NSE					
5	Predictable, clear tax laws and transparent tax administration are important than low tax rates when making in NSE					

Do you believe Tax Investment Incentives are a motivator or they are a gift to the investors?

_____

Which of these tax credits did you enjoy during the net Capital Investment Period?

Tax exemption……27% tax, 20% listing for three years……

25% tax for 30%, first 5 years…… 20% tax, 40% listing for first 5 years……..

B. Relationship between Liquidity Incentives and Stock Market Performance

For this section, use a likert Scale ranging from 1 to 5 (Where 1- strongly agree, 2-Agree, 3-Strongly disagree, 4-Disagree, 5-Neither Agree nor Disagree

		1	2	3	4	5
		Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**
1	Liquidity Incentives at NSE affect stock market performance					
2	Liquidity Incentives are important in making listing decisions at NSE					
3	Stock market liquidity will not enhance incentives for acquiring information about firms or existing corporate governance structure					
4	Greater liquidity in the Public market will result in better valuation in shares than would be seen through private transactions					
5	Companies listed at NSE would easily access equity financing than their unlisted counterparts					
6	Many companies might want to list a NSE because of the highly liquid market position which enables diversification					
7	Liquidity incentives are a gift and not a motivator to investors at NSE					

In your opinion what other liquidity benefits do firms gain upon investing at NSE?

C. Relationship between Growth Incentives and Stock Market Performance

For this section, use a Likert Scale ranging from 1 to 4 (Where 1 Strongly Agree, 2-Agree, 3-Strongly disagree, 4-disagree, 5-Neither Agree nor Disagree

		1	2	3	4	5
		Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor Disagree**
1	Being listed at NSE results in an increase in firm's stock equity					
2	Being listed at NSE results in an increase in total firm's assets					
3	Going Public provides your firm with equity financing opportunities to grow your business					
4	The issuance of Public shares will expand your Investor base and helps set stage for secondary equity financing including private placements					
5	By virtue of being listed and subject to more scrutiny and exposure, a company raises its profile					
6	Stock markets promote growth opportunities to the listed firms					
7	Growth incentives provided by NSE affect stock market performance					

D. Relationship between Visibility Incentives and Stock Market Performance

For this section, use a Likert Scale ranging from 1 to 4 (Where 1 Strongly Agree, 2-Agree, 3-Strongly disagree, 4-disagree, 5-Neither Agree nor Disagree

		1	2	3	4	5
		Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor disagree**
1	NSE firms are more competitive than a non-listed one					
2	NSE Visibility incentives provided at NSE affect stock market performance					
3	NSE listing provides a good public image which helps promote firm Performance					
4	The market value of a public company is much higher compared to a private company with the same structure in the same industry					
5	Publicly filed documents by listed firms at NSE help promote their visibility and hence their performance					
6	Raising Capital through an IPO raises a company's profile, perceived competitiveness and stability					
7	A listed firm is perceived by lenders and suppliers as a safer credit risk					
8	Media Coverage of listed firms at NSE help promote their visibility and hence their performance					
9	Firm Stories at NSE help promote theirvisibility and hence their performance					

F.Relationship between Investors' Perceptions and Stock Market Performance

For this section, use a Likert Scale ranging from 1 to 4 (Where 1 Strongly Agree, 2-Agree, 3-Strongly disagree, 4-disagree, 5-Neither Agree nor Disagree

		1	2	3	4	5
		Strongly Agree	**Agree**	**Strongly Disagree**	**Disagree**	**Neither Agree nor disagree**
1	Majority investors use both fundamental and technical analysis while investing at NSE					
2	NSE Investors are Over Confident of their trading skills and investment decisions					
3	Investors at NSE tend to imitate the trading patterns of previous gainers even without any additional analysis of the market					
4	NSE investors fear the loss more than the gain					
5	Investors at NSE tend to hold on to losing stocks for too long and sell winning stocks too soon					
6	NSE Performance is affected more by Investors' Perceptions than the investment Incentives given					

Appendix II: Target Population

A. Agricultural

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi Ltd.
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd

B. Commercial and Services

8. Express Ltd
9. Kenya Airways Ltd
10. Nation Media Group
11. Standard Group Ltd
12. TPS Eastern Africa (Serena) Ltd
13. Scan Group Ltd
14. Uchumi Supermarket Ltd
15. Hutching Biemer Ltd
16. Longhorn Kenya Ltd

C. Telecommunication and Technology

17. Acess Kenya Group Ltd
18. Safaricom Ltd

D. Automobile and Accessories

19. Car and General (K) Ltd
20. CMC Holdings Ltd
21. Sameer Africa Ltd
22. Marshall (E.A) Ltd

E. Banking

23. Barclays Bank Ltd
24. CFC Stanbic Holdings Ltd
25. Diamond Trust Bank Kenya Ltd
26. Housing Finance Co. Ltd
27. Kenya Commercial Bank Ltd
28. National Bank of Kenya Ltd
29. NIC Bank Ltd
30. Standard Chartered Bank Ltd
31. Equity Bank Ltd
32. The Co-operative Bank of Kenya Ltd

F. Insurance

33. Jubilee Holding Ltd
34. Pan African Insurance Holdings Ltd
35. Kenya Re-Insurance Corporation Ltd
36. CFC Insurance Holdings
37. British –American Investments Company (Kenya) Ltd
38. CIC Insurance Group Ltd

G. Investment

39. City Trust Ltd
40. Olimpia Capital Holding Ltd
41. Centum Investment Co. Ltd
42. Trans-Century Ltd

H. Manufacturing and Allied

43. B.O.C Kenya Ltd
44. British American Tobbaco Kenya Ltd
45. Carbacid Investments Ltd

46. Mumias Sugar Co. Ltd

47. Unga Group Ltd

48. Eveready East Africa Ltd

49. Kenya Orchards Ltd

50. A.Baumann Co. Ltd

51. East African Breweries Ltd

I. Construction and Allied

52. Athi River Mining

53. Bamburi Cement Ltd

54. Crown Berger Ltd

55. E.A. Cables Ltd

56. E.A Portland Cement Ltd

J. Energy and Petroleum

57. Kenol Kobil Ltd

58. Total Kenya Ltd

59. Kengen Ltd

60. Kenya Power and Lighting Co. Ltd

Source: NSE

Appendix III: Sample

A. Agricultural

1. Kapchorua Tea Co. Ltd
2. Limuru Tea Co. Ltd
3. Sasini Ltd

B. Commercial and Services

4. Kenya Airways Ltd
5. Standard Group Ltd
6. Scan Group Ltd
7. Hutching Biemer Ltd

C. Telecommunication and Technology

8. Acess Kenya Group Ltd

D. Automobile and Accessories

9. CMC Holdings Ltd
10. Marshall (E.A) Ltd

E. Banking

11. CFC Stanbic Holdings Ltd
12. Housing Finance Co. Ltd
13. National Bank of Kenya Ltd
14. Standard Chartered Bank Ltd
15. The Co-operative Bank of Kenya Ltd

F. Insurance

16. Pan African Insurance Holdings Ltd
17. CFC Insurance Holdings
18. CIC Insurance Group Ltd

G. Investment

19. Olimpia Capital Holding Ltd

20. Trans-Century Ltd

H. Manufacturing and Allied

21. British American Tobbaco Kenya Ltd

22. Mumias Sugar Co. Ltd

23. Eveready East Africa Ltd

24. Kenya Orchards Ltd

25. East African Breweries Ltd

I. Construction and Allied

26. Athi River Mining

27. Crown Berger Ltd

28. E.A Portland Cement Ltd

J. Energy and Petroleum

29. Total Kenya Ltd

30. Kenya Power and Lighting Co. Ltd

Source: NSE