EFFECT OF CAPITAL ALLOWANCES ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED IN STOCK EXCHANGE IN KENYA

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE, SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF POST GRADUATE DIPLOMA IN CUSTOM/TAX ADMINISTRATION AT JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

2020

DECLARATION

I, ……do hereby declare that this research project is my original work and has not been submitted for a post graduate diploma in any other university.

Signed _____Date_____

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

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ABSTRACT

The objective of this research study was to establish the effect of capital allowances on financial performance of manufacturing firms in Kenya. The objective of the study was answered using three research questions which revolved around Industrial Building Allowances (IBA), Investment Deduction Allowance (IDA) and Wear and Tear Allocations (WTA), and how each affected financial performance of manufacturing firms in Kenya. The study was based on three theories that provided the theoretical background of this research study. This was followed by the review of existing empirical literature for each variable and a conceptual framework of the same. In order to come up with the research gaps, critique of existing literature as advanced by different scholars was carried out and discussed at length. A summary was then drawn from the literature review. The study adopted a quantitative descriptive design, and all nine manufacturing firms listed in the NSE formed part of the population. A survey for all nine manufacturing firms listed on the NSE was performed between 2010 to 2019 and information gathered by uniform information collection type. Data was also drawn from prior economic reports and tax returns filed with the Kenya Revenue Authority for 2010-2019. The information gathered was evaluated using various regression models to identify the connection between capital allowances and financial performance.

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DEDICATION

It’s my genuine gratefulness and warmest regards that I dedicate this research paper to God almighty, my creator, my source of wisdom, knowledge and understanding. He has been my source of strength and providence throughout this course. I also dedicate this work to my beloved parents who have been instrumental in this journey, my lovely wife Brenda Kamau who has encouraged me all through and whose encouragement has made sure that I give all it takes to complete what I started. To my son Kyle Kamau who has been affected by this quest. Thank you my loves for you all can never be replaced. God bless you all.

DEFINITION OF TERMS

Taxation

A means by which governments finance their expenditure by imposing charges on citizens and corporate entities. Taxation is the only known practical manner for collecting resources in order to finance public expenditure for goods and services consumed by any citizenry (Charles E. McLure, 2015)

Industrial Building Allowances (IBA)

This is an allowance on capital expenditure incurred by a person on the construction of an industrial building to be used in a business carried out by them or their lessee. This allowance is claimed by the person who incurred the capital expenditure i.e. the owner of the building and the building must be used for the purpose of the business only so as to enjoy the industrial building deduction. (ITA, 2015)

Investment Deduction Allowance (IDA)

This is a deduction or an allowance granted on cost of a building and machinery installed therein as an incentive to encourage investments. The applicable rates are as follows; (a) Investments situated within Nairobi, Mombasa and Kisumu - 100% investment allowance, (b) Investments worth 200 Million Kenya shillings situated outside Nairobi, Mombasa, Kisumu attract a 150% investment allowance, (c) Investment Deduction-Manufacturing Under Bond-For production of export goods under bonded warehouses, (d) Investment Deduction-Export Processing Zones- 100% investment deduction. (ITA, 2015).

Wear and Tear Allowance (WTA)

This is an allowance that is granted to the investor to cater for wear and tear on machinery. Machinery includes: vehicles, ship, aircraft, plant & machinery, software, furniture and fittings office equipment. The applicable rates are as follows; Class A (37.5%), Class B (30%), Class C (25%), Class D (12.5%) and Telecommunication equipment (straight-line) at 20% (ITA, 2015).

LIST OF ABBREVIATIONS

EPZs Export Processing Zones

FDI Foreign Direct Investment

GDP Gross Domestic Product

IBA Industrial Building Allowances

IDA Investment Deduction Allowances

ITA Income Tax Act

KRA Kenya Revenue Authority

NSE Nairobi Securities Exchange

WTA Wear and Tear Allowance

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CHAPTER 1 : INTRODUCTION

1.1 Background of the Study

Capital allowances are akin to a tax-deductible expense and are available in respect of qualifying capital expenditure incurred on the provision of certain assets in use for the purposes of a trade or rental business. They effectively allow a taxpayer to write off the cost of an asset over a period of time (KPMG, 2019). These can also be referred as tax incentives offered for capital expenditures. Capital allowances are a way of obtaining tax relief on some types of capital expenditure. They are treated as another business expense and so reduce your taxable profit within your basis tax period. They include wear and tear allowances, industrial building deduction, investment deduction and farm-works deductions (KRA, 2020)

Capital deduction as form of tax incentive have been adopted worldwide to accomplish a set of diverse goals, though not in most developing countries the impact is yet to be quantified. The benefit of tax incentives includes encouraging investment in the country, enticing Foreign Direct Investment (FDI) especially in most developing countries where industrialization promoting manufacturing of locally produces goods is encouraged as part of economic development. Other aspect of adopting tax incentive includes creating job opportunity, promoting growth in various sectors economic sector and promoting other activities that address local development needs. Most often, countries with overlying tax incentives to obtain multiple goals (Zee et al., 2002)

Harun, (2015) defines manufacturing company as a firm that uses components, parts or raw materials to produce a finished good. The finished goods can be sold directly to consumers or to other manufacturing businesses that use them for making a different product. The idea is informed by the fiscal theory of compensatory expenditure, which downplays the classical challenges of shifts in the allocation of resources emerging from taxation to a change from the incidence of individual loses and benefits to the economy (Sunday, Arzize& Eton, 2013).

Manufacturing businesses in today's world are normally comprised of machines, robots, computers, and humans that all work in a specific manner to create a product). The manufacturing industry accounted for 12% GDP in 2013/2014 (GOK, 2015

Capital allowances being one of the tax incentives, Alegana, (2012) outlines tax incentives as any enticements that help in diminution of the tax burden of any party in order to inspire them to invest in particular business or activities with aim of getting profit in return.

Gruber, (2005) in his study defined tax incentives as stipends for the general tax regime that is given to a particular group to encourage them to invest by lowering the tax rate or giving tax relief to some of the commodities they are trading with. This includes but not limited to, tax holidays, reduced tax rates on profits, accounting rules allowing for heightened depreciation and loss for tax purposes, Investment deduction and reduction of on import duty

In his research results, Nathan, (2004) states that management of fiscal stimulus is an emerging problem in the development process that needs to be addressed appropriately to avoid countries that do not promote trade at once. Whilst these incentives undoubtedly affect investment decisions on some aspects, the importance of fiscal stimulus in developing countries, such as Kenya, A research has not conducted and findings documented as to whether Capital deduction has any significant effect on growth of manufacturing industries. In Kenya, for example, investment deductions, specific economic zones, tax credit, particular economic zones, reduced tax rates and tax exemption form the principal form of tax breaks. Additional tax incentives permitted in Kenya include; tax breaks on the capital market Capital allowances, benefits from the EPZ and export tax remissions (Wahome, 2013).

1.2 Global perspective of Capital deduction and manufacturing companies

Most Government allow deduction such as investment deduction to enhance economic activities and investments by firms, they use these forms of incentives to channel some special economic activities towards some important sectors of the economy where they are either not felt or not existing at all (Kaplan, 2001). In the USA, Thomas (2007) claims that the government permitted advanced depreciation that was taken into consideration as an associate incentive provided to attract in investments into the USA as compared to other countries where wide attainable quicker depreciation isn't the norm. In the year 2004, enhanced depreciation for equipment and machinery was in the harmony of US dollars 44.7 billion. Jensen and Malesky (2010) observed that despite broad uncertainty concerning the recompenses of globalization, USA presented tax incentives to attraction in investment. They demonstrated that the gauge of those incentives were frequently thought to be too huge to be welfare enhancing financial performance although it depicted incredulities among various economists.

However, notwithstanding the rising impermeable to the contrary, there has been an increase in the size, frequency and magnitude of the tax incentives offered by the US federal government which indicates that the country considers foreign investment as well as extent of development more important.

Thomas (2007) claims that for the case of Canada, tax incentives are more federal than in the USA. For the case of USA, only the central government is involved in setting up the tax incentives but in Canada, it’s not only the federal government, but also the regional governments who are involved.

In Caribbean countries, Van Parys & James (2010) argue that tax incentives have led to losses for instance a loss of 23.5% was recorded in Anguilla and a loss of 53.9% was recorded in Grenada. Furthermore, similar opinions are resonated by Goyal & Chai (2008) who discovered that if not well planned, tax incentives can also lead to losses.

The scholars argued that, tax incentives led to a loss of between 9% - 16%. This therefore reveals that; tax incentives are a double-edged sword with both benefits and severe consequences. The Institute of Economic Affairs (2012) reports that tax incentives are always advancing and are widespread. It argues that tax incentive is a planning that grants any individual or action great conditions that move away from the regular arrangements of the tax benefit.

In the context of China, Gourdon, Monjon, and Poncet (2014) established how frequent changes in value added tax were related to performance of exports in the Chinese economy. The time period of the study spanned five years from the year 2003 to the year 2012 with a focus on export data. A timer series data approach was considered for this study and the data used was purely secondary. Changes in the value-added rebates were established to significantly and positively affect the volume exported outside the country in the study period. In terms of magnitude, a one percent increase in value added tax was found to contribute to a seven percent increase in the volume of exports outside China. The study played a role of linking value added tax to performance.

1.1.2 African perspective of Tax incentives and manufacturing companies

Despite these known benefits of tax incentives most African countries have deeply depended on primary products as their chief export commodity (UNECA, 2013) and the productivity of other sectors other than the agricultural and manufacturing sectors which have remained a source of concern to both the policy and research community.

For example, there have been numerous calls for structural transformation of African economies from low value-added activities and sectors to higher value-addition (IMF, 2012).

Most of the large manufacturing firms have moved to other countries or restructured their operations, determining to help the local market through importing from low-cost manufacturing areas such as Egypt therefore resulting in job losses (Nyabiage & Kapchanga,

2014) citing turbulent operating environment and high operating costs. This is an indication that many manufacturing firms in Kenya are experiencing performance challenges with many reporting profit warnings due to challenges in the operating environment (RoK, 2014). Perhaps tax incentive initiative may save most of the manufacturing firms in Africa and most specifically in Kenya.

One of the main drivers of the high cost of doing business facing manufacturing industries thereby hampering its development was the problem of unwarranted taxation in the form of high tax rate, double and multiple taxation (Uwalomwa et al., 2016). Hence, to mitigate this challenge, the government had advanced various tax incentives to the manufacturing sector. According to Uwalomwa, Ranti, Kingsley, and Chinenye (2016), some of the problems faced by manufacturing industries include difficult and unfavorable operating environment due to infrastructural shortage and inaccessibility to funds to finance capital projects. Another problem facing manufacturing industries thereby impeding its development is the problem of unnecessary taxation in the form of high tax rate, double and multiple taxation. Though taxation forms one of the major sources of government, it may affect manufacturing firms negatively if not properly applied and managed. Thus, higher tax rates serve as deterrent to firms for investment and development as it leaves firms with less money to plough back to the business. This eventually discourages productivity, investment and the level of output by the manufacturing industry Uwalomwa, Ranti, Kingsley, and Chinenye (2016). In Tanzania, tax incentives range from incentives on agricultural investors in the form of deferment of VAT payments on project capital goods as well as zero-rated value-added tax on agricultural exports (Network-Africa& Action Aid International, 2012).

1.1.3 Kenyan perspective of Tax incentive and manufacturing companies

In Kenya companies including those operating at EPZ benefit from major tax incentives especially capital allowances such as Industrial Building Deduction, Investment deduction and Wear and Tear.

The manufacturing companies are allowed to claim deductions from their corporate tax liability; this enables such companies to report higher profit after tax leading to higher financial performance. The Kenyan government, through capital allowances attempt to influence physical and financial capital.

Capital expenditure in accounting practice is not charged to profits of the business. Section 16 of the Income Tax Act (2010) specifically bars capital expenditure as claim against the total income of a person. However, capital allowance is given as an incentive to investors on capital expenditure incurred for business purposes. The corporate tax rate for resident companies is 30% while non-resident companies are taxed at 37.5%. EPZs are taxed at 25% for the 10 years succeeding the tax holiday (Income Tax Act 2010**.**The government has allowed a claim of 150% for companies who invest outside the three cities and incur expenditures of more than 200 million. The researcher will find out if the tax incentives granted in Kenya promote the growth of manufacturing companies as envisioned

1.2 Statement of the problem

The aim of this research study is to find out whether the capital allowances or deductions have an effect on financial performance of NSE listed manufacturing firms in Kenya. In a bid to investigate the effect of capital allowances or deduction in Kenya, a number of studies has been conducted for a similar purpose as the researcher, for instance Tembur (2016) examined effect of tax incentives on financial performance of export processing zone firms in Kenya. The study portrayed a conceptual gap as it focused on the export processing zone firms while the current study focuses on the manufacturing firms.

A research gap was also depicted in the studies conducted by Onyango (2015) that examined the effect of tax incentives on financial performance of five-star hotels in Nairobi County, the study revealed a conceptual gap since it focused on the five-star hotels.

It can be argued that tax incentives such as capital allowances or deductions given to the manufacturing sector are crucial strategies meant to reactivate ailing industries and also increase the survival rates of firms and in the process, providing employment to thousands of unemployed people (Fakile & Uwuigbe, 2013). As a tax incentive capital allowances provide tax relief across a wide range of capital expenditure. As to whether these tax incentives have significantly contributed to financial performance is a matter that needs to be investigated.

Kenya is going through premature deindustrialization in a context where manufacturing and industry are still relatively under-developed. Kenya seems to have 'peaked' at a point much lower than in much of Asia. Despite the government of Kenyan granting lucrative tax incentives manufacturing companies are still faced with difficulties such huge loss, stagnation and some end up not celebrating their 10^{th} anniversaries. The manufacturing firms' opportunities are large but the challenges are also substantial (Ekeno, 2010). According to GoK report (2013), performance of the manufacturing sector in Kenya has been on the decline for a considerable period of time with its contribution to GDP stagnating at 10 % from 1960's (GOK, 2013). Generally, the manufacturing sectors' average growth percentage has continued to stagnate at three to four percent over the years.

The manufacturing sector in Kenya plays an important role in the third world economy, alleviating poverty and affiliating with other larger corporations. They contribute to a great source of service provision and local source of to larger corporations. Usually they have vast local knowledge of resources, purchasing trends and supply patterns (Kwamboka, 2010).

However, statistics from World Bank reveals that the Kenyan manufacturers of large-scale firms have experienced stagnation and declining profits for the last five years due to a turbulent operating environment (World Bank, 2014). It is estimated that large manufacturing companies have lost 70 per cent of their market share in East Africa largely attributed to high operational costs (RoK, 2014). In 2014, manufacturing sector in Kenya contributed barely 10% to the GDP which represented 3.4 per cent growth to Sh.537.3 Billion indicating a decline from the previous year 2013 where it had reported a 5.6 per cent growth mainly due to a challenging operating environment like high operational costs (KNBS, 2014).

While the current study will focus on the manufacturing firms listed in Nairobi Stock Exchange' (2013) conducted a study on the effect of tax incentives on foreign direct investments (FDI) in Kenya but did not focus on financial performance. Hence, this study seeks to fill this gap by examining tax incentives and their influence on financial performance on manufacturing companies in Industrial area. The review also showed that most of the studies have been focused on export processing zone and only company listed in the stock exchange with less focus on companies falling under small and medium enterprises capital allowance incentives. Hence, this study current study tends to fill these gaps by assessing effect of capital deduction on financial performance among the listed manufacturing firms in Kenya.

1.3 Objectives of the Study

The main objective of the study is to find out the effect of capital allowances on financial performance of manufacturing firms listed in Nairobi Stock Exchange in Kenya. The study was guided by the following specific objectives.

1.3.1 Specific Objectives

(a) To find out the effect of Industrial Building Allowances (IBA) on financial performance of manufacturing firms in Kenya

(b) To established the effect of Investment Deduction Allowance (IDA) on financial performance of manufacturing firms in Kenya

(c) To determine the effect of wear and tear allowance (WTA) on financial performance of manufacturing firms in Kenya

1.4 Research Questions

The research will be guided by the following research questions

(a) What is the effect of Industrial Building Allowances (IBA) on financial performance of manufacturing firms in Kenya?

(b) What is the effect of Investment Deduction Allowance (IDA) on financial performance of manufacturing firms in Kenya?

(c) What is the effect of wear and tear allowance (WTA) on financial performance of manufacturing firms in Kenya?

1.5 Justification of the Study

The results of this research will be important for decision makers to review policies to promote local manufacturing while working on a fair fiscal policy to ensure that the government does not fail to finance its big project, including the Big Four Agenda. The findings will also be important for the different manufacturers since this will allow them to remain competitive through the tax-available means of increasing their profits after taxation. This study will serve as an insight into capital allowances and their impact on the financial performance of manufacturing firms in Kenya.

The research findings will also be useful in advancing taxation systems and reinforcing fiscal policies for the Government of Kenya, policy makers, legislators and regulatory bodies such as the Kenya Revenue Authority. The study is also important for researchers because it will temporarily fill a large gap in literature and will be a source of reference for further taxation studies. This study will also contribute to academic knowledge, research facilities, schools and individuals. The research results will also benefit future researchers and academics.

The study provides background information for research organizations and scholars interested in further research in this field.

1.6 Scope of the Study

The study covered all the nine manufacturing firms listed at the NSE which are B.O.C Kenya Ltd, British American Tobacco Kenya Ltd, Carbacid Investments Ltd, East African Breweries Ltd, Mumias Sugar Co. Ltd, Unga Group Ltd Ord, Eveready East Africa Ltd, Kenya Orchards Ltd and Flame Tree Group Holdings Ltd listed at the NSE. These companies were in operation by close of the year 2017. In this research study, the target population was all the nine manufacturing companies listed under the manufacturing and allied sector in the NSE. Since the population is not too large, no sampling was done and a census was therefore carried out on all the nine manufacturing firms listed on the Nairobi Securities Exchange. In this study, secondary data was used. From past financial records, financial and statistical data was obtained and tax returns that were filed between 2010 and 2019. Calculations were made to quantify the changes and show the changes (Wahome, 2013)

1.7 Limitations of the Study

The research study had several constraints. The study was restricted to a period of ten years from 2010 to 2019. Secondary data from annual financial reports and tax calculation schedules was gathered for each company.

It was a very tiresome process for the researchers to obtain the tax calculation schedule for each company because some data have been stored in the archives.

The study focused solely on quantifiable factors including wear and tear allowances, industrial construction allocations, investment deduction allowances and the financial performance between 2010 and 2019

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

This chapter will examine current ideas on capital allowances and their financial performance analyzes for manufacturing firms in Kenya. It also discusses the theories behind this research as well as the theoretical context of the study, and discusses in detail the conceptual framework used for the evaluation of the relationship between dependent and independent variables. Critics of existing literature advanced by various academics will also be widely discussed. In conclusion, this literature review has drawn a summary. The findings criticized the knowledge gaps.

2.2 Theoretical review

In terms of tax incentives and more specifically capital allowances and financial performance, many theories have been floated. The study was influenced by: Optimal Tax Theory, Normative Theory and Neo-Classical Theory.

2.2.1 Optimal Tax Theory

Ramsey (1927) developed an optimum sales tax theory for commodities. The intersection between the downward curve of demand and upward curves of supply means excess production and surplus consumers. Any sales tax reduces production and causes a loss of deadweight (DWL). If we assume that demand and supply elasticity vary considerably, then all such DWL triangles appear to be minimized by a single standard tax rate on all commodities. Ramsey suggested that, when responding to changes in tax prices, we assume suppliers are all perfectly flexible, and then conclude that taxes on goods that respond more inelastically to consumer demands would lead to less DWL distortions. The triangles of DWL are now Harberger (after Arnold Harberger).

Optimal tax theory is to investigate how best to design a tax to reduce distortion and inefficiency by distortionary taxation (Mirrlees, 1976).

A neutral tax is a theoretical tax which prevents distortion and ineffectiveness. If a taxpayer has to choose between two mutually exclusive economic projects (say investments), which have to face the same pre-tax risk and return, the rational actor should choose the one with the lower taxes or tax breaks.

Economists argue that taxes usually distort behaviour. For instance, because only economic players who engage in' job market activities ' receive income tax liability on their wages, people who are able to consume their leisure or produce their households outside the market say that they provide domestic services rather than hiring a maid are not subject to taxation.

The effect of sales taxes on goods also leads to distortions if food prepared in restaurants is taxed, but supermarkets that are bought at home are not taxed when they are bought. This difference in commodity taxation can lead to inefficiency (by de-encouraging household market work). Modern, optimal tax theory seeks marginal losses of deadweight and can be used to assess the effectiveness of tax reform (Mayshar, 1990).

This theory forms the basis of the main objective of this study. Optimal tax theory, as it informs fiscal incentives for which capital allowances is one of them, is relevant to this study. Incentives and excise tax incentives EPZ's VAT eligible companies pay lower taxes, higher Return of Assets (ROA) and Equity Return (ROE), derived from tax gain (Ohaka & Agundu, 2012). Tax incentives also attract investments and increase the profitability of a company.

Optimal taxation is relevant to this study as it concerns how various forms of taxation should be designed to maximize social welfare. The task requires an integrated consideration of the revenue-raising and distributive objectives of taxation. This relates well with the granting of capital allowances to manufacturing firms in order to improve their financial performance and create more jobs in the economy, thereby promoting social an economic welfare

2.2.2 Normative theory

Chua (1995) posit that according to this theory every incentive has advantages and disadvantages, and it is therefore extremely difficult to determine one set of incentives which work for very different economies with different challenges and circumstances. Much of determining what works depends on the circumstance of the economy, the competence of the tax administration, the type of investment being courted and the budgetary constraints of the government stimulates investment in the desired sector or location, with minimal revenue leakage, and provides minimal opportunities for tax planning.

Boadway and Shah (1995) argue that any benefit such as an incentive allocated by public servants or politicians is potentially open to abuse and corruption. There is therefore a strong argument that incentives should be automatically available to all investors who meet a set of open and transparent criteria.

However, an alternative argument is that firms should receive just enough incentive to induce them to invest, and no more. Each potential investment therefore needs to receive an incentive specific to its particular situation. Clearly, which of these two alternatives the government chooses depends on the strength of governance within the appropriate institutions. If public servants and politicians retain decision-making power over the allocation of incentives, then the processes and outcomes need to be as transparent as possible.

Moderate tax incentives that are targeted to new investment in machinery, equipment and research and development, provide up-front incentives, that are more likely to be cost effective in stimulating desired investment. These can have powerful signaling effects without significant loss of revenue (Chukwumerije and Akinyomi, 2011). Investment tax credits and allowances provide specific and targeted policy tools to achieve this. Reducing corporate tax to a level comparable with other countries in the region is a sound tax incentive.

However, reductions beyond the level found in capital exporting countries say, below 20-30% often bring about greater revenue losses than increases in investment (Fletcher, 2003). This theory is relevant to this study because it helps in determining how best capital allowances can be granted in order to enhance financial performance of manufacturing firms

2.2.3 Neo-classical Theory

The neo-classical theory developed by J. Mutt, A. Laffer, and others is based on the assumption that the state is obligated to remove obstacles to free market competition because the market can and must regulate itself without external intervention; in addition, it can achieve economic equilibrium. According to this theory, taxation policy should be developed under the same assumptions: taxes must be as small as possible and corporations should be granted significant tax exemptions. Otherwise, a high tax burden would hinder economic activity and restraint the investment policies of corporations, which would lead to a downfall in the production funds renewal and in an economic recession. A restricted taxation policy would allow the market to provide independently for fast development and would lead to a significant expansion of the taxation basis.

Neo-classical theory argues that giving tax incentives such as capital allowances instead of incentives for a set of investors violates one of the main principles of a good tax system: the horizontal equity principle. That inequality distorts potential investors ' price signals, which leads to inefficient capital allocation (Boadway & Shah, 1995).

The most common justification for specific incentives is that the decision to invest in certain industries and locations actually constitutes inefficiencies that justify state intervention.

Market failures lead to either too much or too little investment in certain sectors or locations. The most frequently cited major market failures; in certain areas, positive externalities not internalized at the project's return rate are higher than in others.

Examples include research and development in which investment generates a social return higher than private investment, because not all technical skills can be patented efficiently and justify subsidizing research and development investment (Kaplan & Norton, 2001).

Barbour (2005) highlights other alleged tax-incentive benefits like symbolic signaling effects and the need to make up for shortcomings elsewhere in the investment system. Tax relief or cash subsidies provide incentives for investment. International experience shows that such incentives in investment decisions are of minor importance. Investment decisions by companies are based on many factors, including future demand forecasts, policy certainty of the future, predominant interest rates and competitor movements. Usually, they see incentives as good, but they don't break. Incentives remain a popular policy for both developed and developing countries, however.

This theory is based on the study objectives aimed at assessing the effectiveness of each incentive to influence the performance of manufacturing firms. It was the basis for clarifying whether tax incentives themselves could meet the desired objective of performance recovery and stability. (Parys & James, 2010)

2.3 Empirical Review

Multiple research studies were conducted at both global and local level to establish the effect of different corporate or business performance indicators of tax incentives. When investigating corporate taxation, it is difficult to overlook the use of tax incentives in developing countries. Tax incentives Klemm (2010) defines as measures for improving the tax treatment in comparison with the general industry of certain activities or industries (Klemm 2010). Although tax incentives are certainly not unique to developing countries, it is worth considering their role in developing countries separately because certain incentives and certain organizational characteristics are common in developing countries.

In general, developing countries use special revenue-tax incentives, whereas developing states tend to use a combination of targeted and more general incentives which can be incorporated into income tax, investment and other legislation or simply state decrees (Van Parys, 2012).

Ngure (2018) did a study on tax incentives and performance of selected manufacturing firms in Kenya. The main aim of the study was to assess tax incentives and their effect on the performance of selected manufacturing firms in Kenya. Specifically, the study sought to; examine the effect of corporate income tax incentives capital allowance incentives, custom duty incentives and excise tax incentives on performance of selected manufacturing firms in Kenya. The study adopted a descriptive research design. The study findings recommended that the government needed to expand some of the tax incentives particularly capital allowances, excise tax incentives and custom duty incentives whose effect was yet to be fully felt within these firms compared to corporate income tax incentives. The study noted the need for greater diversification in the incentives granted and also greater sustainability. The study recommended the need for tax incentives among the firms so as to ensure the survival of a greater number of firms

Olaleye, et al (2015) did a study on capital allowances and foreign direct investment in listed manufacturing companies in Nigeria. The objective of the study was to establish the effect of Capital Allowance on Foreign Direct Investment (FDI) in Listed Manufacturing Companies in Nigeria. The study adopted descriptive research design and the target population of the study was the 74 Listed Manufacturing Companies with approximately more than 56,000 employees. The study recommended that tax authority should introduce a policy of carrying over investment allowance that is not utilised to the subsequent year as an advantage to the investors to reduce their tax liability. The results of correlation showed that there was a positive significant linear relationship between capital allowance incentives and foreign direct investment.

UNCTAD (2011) comparative analysis in Kenya, Uganda and Tanzania on FDI inflows revealed that Uganda attracted more FDI, although offering less incentives than Kenya. Tax incentives are not always effective because they can lead to fiscal competition between neighboring countries. It also states that a cost-benefit study to determine the net benefit of tax incentives has never been conducted. The government is responsible for developing effective fiscal policies, the benefits of which are greater than their costs. Musyoka (2012) carried out a study on foreign direct investment tax incentives.

He used information for investment incentives, trade-related incentives, import duty exemption, and FDI inflows for a 10-year period. In the analysis of correspondences and regression, mean, mode and median were calculated in order to determine the relationship between dependent and independent variables. The results showed that tax incentives resulted in losses of government income.

According to the PSC (2012), the economic variables of tax stimulus were not as follows: increased investment; generation of employment; technological improvements and exports. The reports argue that tax incentives are important for promoting these variables but, especially when they are likely to be abused, they deprive the government of much-needed short-term incomes. Government efforts should shift away from offering tax incentives to encourage domestic savings in the formal sector to increase employment (Parys & James, 2010)

Mayende (2013) did a study on the effects of tax incentives on firm performance: evidence from Uganda. This paper attempted to analyse the effects of tax incentives on the performance of Ugandan manufacturing firms in terms of gross sales and value-added employing panel data estimation techniques. The study findings showed that firms with tax incentives perform better in terms of gross sales and value added than their counterparts.

The major policy implication of the study findings indicates that Government needs to streamline the provision of tax incentives for better firm performance. The findings of the study indicate that tax incentives have positive impact on firm performance in terms of gross sales and value added. The study also established that firm age and firm size have a positive impact on firm performance. Large and medium firms perform better than small firms. Large firms are able to maximize the economies of scale and increase their output. In addition, the study findings show that the level of education of manager is significant in determining firm performance. Other firm characteristics such as ownership by domestic firm, foreign and joint venture do not affect firm performance. The study finding showed that ownership experience in a foreign firm does not affect firm performance

Ondabu, Muturi, Sifunjo (2016) did a study on the effects of tax incentive on performance of listed firms in Kenya. The objective of the study was to determine the relationship between tax incentives and stock market performance. This study adopted a descriptive research design with a study population of 61 listed firms in NSE. A sample of 150 respondents was picked through stratified random sampling technique from 30 firms listed at NSE. The study used both primary and secondary data sources in gathering data for analysis.

Data collection involved self-administration of questionnaires. The study used the Cronbach (Alpha – α) model to test the reliability of the data.

The findings from this study reveal that tax incentives have an insignificant effect on NSE performance. The study recommended inter alia 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 rather than granting investment incentives

Agundu and Ohaka (2013) examined the extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector.

The corporate financial performance attractions considered were profit after tax (PAT), return on total assets (ROA), and return on shareholders' equity (ROE). Financial data accessed for analysis related to 58 manufacturing firms quoted on the Nigerian Stock Exchange (NSE). Statistical results such as coefficients of correlation and determination emerging from the process justified the potency of capital allowance as it was significantly associated with PAT, ROA and ROE. In the light of the analytical revelations, it was imperative for accounting and finance executives in Nigerian manufacturing firms to professionally enumerate and profile their investments in qualifying industrial assets in accordance with extant tax guides in order to benefit from capital allowance grants. The attractiveness of financial economies of capital allowance notwithstanding, manufacturing sector investors should exercise restraint and avoid indiscriminate industrial asset requisition and expansion.

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 calculated to 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) carried out a research to establish the impact of tax incentives on FDI inflows of firms listed at the NSE. His focus was on the impact of ID, IBD, and wear and tear towards attracting FDI inflows. The population included 60 firms listed at NSE while the sample included 10 firms selected using simple random method.

The study adopted secondary data where data relating to FDI and incentives were collected from annual reports and audited financial statements covering a period of 2008-2011.

For data analysis, Microsoft excel sheets was used to analyze quantitative data while E-view software was used to analyze quantitative data with an aid of a conceptual model.

Correlation analysis carried out on FDI and tax incentives variables showed that tax incentives impacted on FDI inflows of firms listed at NSE. Wear and tear had a strong relationship with FDI.

Alhulail (2014) examined the effects of tax incentives on sales of eco-friendly vehicles in Japan. The study used a sample of 10 vehicles in Japan that fall under eco-friendly cars for the period April 2006 to March 2013. The study obtained secondary data and analyzed using regression analysis. The study finds that the tax incentives have a significant positive effect on sales of ecofriendly vehicles. Uwaume and Ordu (2014) carried out a study to establish the impact of tax incentives one economic development in Nigeria from years 2004 to 2014. The population of the study involved51 respondents from management, tax payers and staff of selected manufacturing firms in the South-South political zones of Nigeria. The study found that sufficient tax incentives enhanced industrial growth and economic development and recommended the government waive certain taxes on corporate bodies to help them mature especially at their early stage, the government should not focus on the revenue that is lost at this point because the benefits will surpass in the long-run what is lost at the initial times.

Onyango (2015) sought to establish the effect of tax incentives on financial performance of Five-Star hotels in Nairobi County. The study adopted the use of quantitative descriptive design. For the purpose of the research, the population constituted all the seven Five-Star hotels in Nairobi County. A census was conducted for all the seven Five-Star hotels using a questionnaire. The response rate attained was 100%. The data collected was provided by Management Accountants of the Five -Star Hotels. It was found out from the regression and correlation analysis that there was a negative relationship between investment deduction and industrial building deductions and financial performance of five-star hotels in Nairobi County.

The study also concluded that Wear and tear allowances positively influenced the financial performance of five-star hotels in Nairobi County. Tax incentives are to be enjoyed by all tax payers as per the taxation cannon of equality (Musgrave, 2005) but in this study, the researcher considered only seven-star hotels which is a small proportion of the hospitality players in Nairobi County.

Twesige, Gasheja (2019) did a study to analyze the effect of tax incentives on the growth of SMEs in Rwanda taking SMEs in Nyarugenge as the case study.

Qualitative and quantitative research approach was adopted in this study. A sample of 136 SMEs was determined using the Silovin and Yemen's formula of sample size.

Simple random and purposive sampling technique was used to select the sample. Data was analysed using descriptive statistics. A multiple regression analysis was used to explain between variables. The study indicated that there was a strong positive and significant relationship between tax incentives and the growth of small and medium enterprises in Rwanda as approved by coefficients of correlation which was equal to 88.8% of R-square. The study concluded that tax incentives are the key to the sustainable growth of SMEs. The government should design policies that specifically address issues related to the sustainable growth of SMEs

2.4 Conceptual Framework

This research study proposed a conceptual framework in which the independent variables are Industrial Building Allowances (IBA), Investment Deduction Allowance (IDA) and Wear and Tear Allocations (WTA)

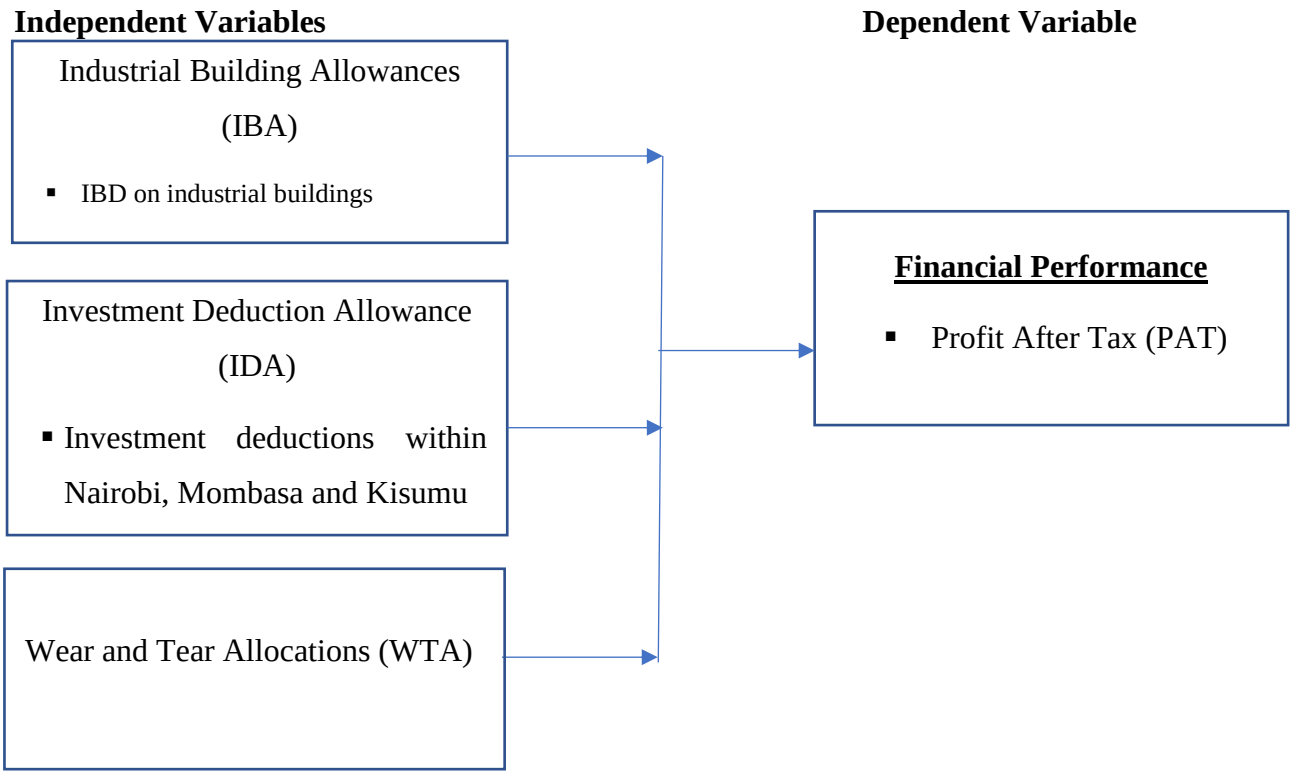

Figure 2-1: Conceptual Framework

2.4.1 Industrial Building Allowances (IBA)

When calculating gain or profit in relation to a person's capital expenditure for the construction of an industrial building to be used by him or his renter, this allowance shall be considered.

The allowance is generally not based on construction costs, but on capital expenditure for the building of an industrial building. This means that any income expenses whether or not tax deductibles are eligible for the allowance. Expenditure for land preparation is part of building costs, but not the cost of land itself. Furthermore, the allowance has to be claimed for any income year when the building is owned and used. This means there will be no allowance claim after the property has been transferred or when the building is not in use and the buildings have to be used for the purposes of the business

The Income Tax Act (2015) provides for IBA claims of 2.5% for 40 years on the cost of buildings used for manufacturing purposes and of 10% for 10 years for hotel premises.

The Act allows costs for the construction of an industrial building for businesses and any civil works or structures, where they relate to or contribute towards the use of buildings that include: roads and parking areas, railway lines and related structures, water and industrial wastewater and sewage facilities, electricity transmission and pylons and other walls of electricity and security.

2.4.2 Investment Deduction Allowances (IDA)

In accordance with the Income Tax Act Cap 470, IDA is granted to companies that incur capital expenditures on the construction of the building, and on the acquisition and installation of a new machinery and to those that are owners or tenants of that machinery which also use this building for the production, processing and distribution of electricity or for the following auxiliary purposes. This includes: construction of the buildings for production purposes; purchase of and installation of machinery used to manufacture and build a hotel building certified by the commissioner (Income Tax Act, 2015).

This is a once for all allowance granted during the year the asset is first used as an incentive for incentives, based on building costs and machinery installed in it. An investment deduction is granted to support: the development of normal-manufacturing industries, tourism and shipping, exporting for the benefit of more foreign exchange (e.g., EPZ), the investment by foreign investors in Kenya and the promotion of the development of industries outside of Kisumu, Nairobi and Mombasa's leading urban centers (Income Tax Act 2015).

Companies claim IDA at 100 %, while companies that invest outside the three cities for Kshs200 million and over 150 percent. (Income Tax Act, 2015)

2.4.3 Wear and Tear Allowances (WTA)

This is an allowance for machinery wear and tear granted to the investor. Wear and tear allowances are charged on capital expenditure on machinery and equipment in five classes, all

of which offer the allowance at different rates. Qualifying equipment is classified into four classes. The first class comprises heavy equipment such as tractors, harvesters and earth-moving equipment among other heavy equipment. A rate of 37,5% is used to calculate class one machine allowances. Class two includes other vehicles and aircraft that are self-propelled and uses a rate of 25 percent. Other non-class 1 or 2 machines in class 3 comprise the third class and include ships, among other machines, with a rate of 12.5 percent. The last class consists of office equipment, for example printers and computers, with a 30 percent capital allowance. (Income Tax Act, 2015)

2.5 Critique of the existing literature

Empirical conclusions from the literature review revealed mixed results from empirical studies in non-manufacturing sectors; Kimeu (2013), Otumba (1995), Ojochogwu and Ojeka (2012). None of local studies investigated the relationship between the effects of capital allowances on financial performance of manufacturing firms in Kenya. The aim of this study is therefore to find a solution to the question of research: How do capital allowances affect the financial performance of manufacturing firms in Kenya?

2.6 Chapter Summary

Chapter 2 has carried out a comprehensive study of the impact of tax incentives on financial performance in the past. The literary review of this chapter was strongly influenced by the three objectives of the research study. The chapter examined literature critically in order to identify knowledge gaps solely to justify the current study. After identifying the knowledge gaps, the researcher then created a conceptual framework for answering questions in the research study. The chapter below provides the methodology of researchers to answer research questions and objectives.

2.7 Research gaps

It emerges from the literature review that this study must fill a research gap. First, the relationship between capital allowances and financial performance of manufacturing firms in Kenya is lacking in knowledge. Wahome (2013) examined the impact of tax incentives in NSE FDI inflows on companies. The results of the study revealed a strong link between wear and tear allowances and FDI inflows. Deductions and investment deductions for industrial building were not significantly associated with FDI inflows.

Kimeu (2013) studied the effect of fiscal reforms on immobiliary firms ' financial performance in Kenya. Musyoka (2012) studied the relationship between tax incentives and foreign direct investment in Kenya as a positive relation to the economic performance of real estate firms in Kenya. The study found that the implementation of tax incentives in Kenya did not improve foreign direct investment significantly.

Chukwumerije and Akinyomi (2011) examined the impact of tax incentives on the overall performance of the registered small-scale industries in Rivers State, Nigeria. The findings show that different tax incentives are available to small industries and are well known to the operators in these industries. Tax incentives have also been found to have a positive impact on profitability, staff strength, and small business growth and development. Analysis of these investigative studies shows that in Kenya no research was ever conducted on the effect of capital allowances on the financial performance of manufacturing firms in Kenya. This study aims to address this gap by assessing the capital allowances on the financial performance of manufacturing in Kenya. With capital allowances as tax incentives increasing attention in many developing countries, the effects of capital allowances on the financial performance of manufacturing firms in Kenya should be investigated.

2.7.1 Research table

Author, Year & Title	Research Summary	How this research is different: The gap we are addressing
Ngure (2018) The effect of tax incentives on performance of selected manufacturing firms in Kenya	The main aim of the study was to assess tax incentives and their effect on the performance of selected manufacturing firms in Kenya. Specifically, the study sought to; examine the effect of corporate income tax incentives capital allowance incentives, custom duty incentives and excise tax incentives on performance of selected manufacturing firms in Kenya. The study adopted a descriptive research design.	The focus is on the effect of capital allowances on financial performance of manufacturing listed firms listed in the NSE. We are narrowing down to capital allowances only as compared to this study which investigated many other tax incentives and also, we are looking at all the listed firms in the NSE in our study
Olaleye, et al (2015) Capital allowances and foreign direct investment in listed manufacturing companies in Nigeria.	The objective of the study was to establish the effect of Capital Allowance on Foreign Direct Investment (FDI) in Listed Manufacturing Companies in Nigeria. The study adopted descriptive research design and the target population of the study was the 74 Listed Manufacturing Companies with approximately more than 56,000 employees.	Our focus is on effect of capital allowances on financial performance of manufacturing firms listed in the NSE in Kenya
Mayende (2013) did a study on the effects of tax incentives on firm	This paper attempted to analyse the effects of tax incentives on the performance of Ugandan manufacturing firms in terms of gross sales and value-	Return on assets and profit after tax are two areas of financial performance of listed

performance: evidence from Uganda.	added employing panel data estimation techniques. The study findings showed that firms with tax incentives perform better in terms of gross sales and value added than their counterparts. The major policy implication of the study findings indicates that Government needs to streamline the provision of tax incentives for better firm performance	manufacturing firms in Kenya that our study seeks to find out
Ondabu, Muturi, Sifunjo (2016) did a study on the effects of tax incentive on performance of listed firms in Kenya.	The objective of the study was to determine the relationship between tax incentives and stock market performance. This study adopted a descriptive research design with a study population of 61 listed firms in NSE. A sample of 150 respondents was picked through stratified random sampling technique from 30 firms listed at NSE. The study used both primary and secondary data sources in gathering data for analysis. Data collection involved self-administration of questionnaires. The study used the Cronbach (Alpha – α) model to test the reliability of the data. The findings from this study reveal that tax incentives have an insignificant effect on NSE performance.	Our study is focusing on effect of capital allowances on listed manufacturing firms in Kenya and not all the tax incentives as per this study

Agundu and Ohaka (2013) examined the extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector.	The corporate financial performance attractions considered were profit after tax (PAT), return on total assets (ROA), and return on shareholders' equity (ROE). Financial data accessed for analysis related to 58 manufacturing firms quoted on the Nigerian Stock Exchange (NSE).	Return on assets (ROA) and profit after tax (PAT) are two areas of financial performance of listed manufacturing firms in Kenya that our study seeks to find out compared to this which looked at profit after tax (PAT), return on total assets (ROA), and return on shareholders' equity (ROE)
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 calculated to 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). The study adopted secondary data where data relating to FDI and incentives were collected from annual reports and audited financial statements covering a period of 2008-2011.	Our study is focusing on effect of capital allowances on listed manufacturing firms in Kenya and not the relationship between tax incentives and foreign direct investments (FDI) as per this study

Alhulail (2014) examined the effects of tax incentives on sales of eco-friendly vehicles in Japan.	The study used a sample of 10 vehicles in Japan that fall under eco-friendly cars for the period April 2006 to March 2013. The study obtained secondary data and analyzed using regression analysis. The study finds that the tax incentives have a significant positive effect on sales of ecofriendly vehicles.	Our focus is on the effect of capital allowances on listed manufacturing firms in Kenya as opposed to this study which looked at the effects of tax incentives on sales of eco-friendly vehicles in Japan
Uwaume and Ordu (2014) carried out a study to establish the impact of tax incentives one economic development in Nigeria	The population of the study involved 51 respondents from management, tax payers and staff of selected manufacturing firms in the South-South political zones of Nigeria. The study found that sufficient tax incentives enhanced industrial growth and economic development and recommended the government waive certain taxes on corporate bodies to help them mature especially at their early stage	Our research study is on the effect of capital allowances on listed manufacturing firms in Kenya as opposed to this study which looked at impact of tax incentives on economic development in Nigeria
Onyango (2015) sought to establish the effect of tax incentives on financial performance of Five-Star hotels in Nairobi County.	The study adopted the use of quantitative descriptive design. For the purpose of the research, the population constituted all the seven Five-Star hotels in Nairobi County. A census was conducted for all the seven Five-Star hotels using a questionnaire. The response rate attained was 100%. The data collected was provided by Management Accountants of the Five -Star Hotels. It	Our research study is premised on effect of capital allowances (one of the tax incentives) on the manufacturing industry as opposed to this study that focused on the hospitality industry (five star hotels)

	was found out from the regression and correlation analysis that there was a negative relationship between investment deduction and industrial building deductions and financial performance of five-star hotels in Nairobi County. The study also concluded that Wear and tear allowances positively influenced the financial performance of five-star hotels in Nairobi County.	
Twesige, Gasheja (2019) did a study to analyze the effect of tax incentives on the growth of SMEs in Rwanda taking SMEs in Nyarugenge as the case study.	Qualitative and quantitative research approach was adopted in this study. A sample of 136 SMEs was determined using the Silovin and Yemen's formula of sample size. Simple random and purposive sampling technique was used to select the sample. Data was analysed using descriptive statistics. A multiple regression analysis was used to explain between variables. The study indicated that there was a strong positive and significant relationship between tax incentives and the growth of small and medium enterprises in Rwanda as approved by coefficients of correlation which was equal to 88.8% of R-square.	The main focus of our study is to find out the effect of capital allowances on financial performance of listed manufacturing firms in Kenya as opposed to this study that dealt with effect of tax incentives on the growth of SMEs in Rwanda

Table 2.1: Research Table

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design and methodology that was used for the study. It showcases and discusses how the research was conducted, the data collection methods and the analysis and reporting of the data.

3.2 Research Design

Research design refers to the arrangement of the conditions for data collection and analysis so that significance to the research process can be combined with economic efficiency (Babbie, 2002). Furthermore, Kothari (2004) noted that the research design is a framework that allows smooth sailing of the various research activities to make research as efficient as possible so that optimum information is provided with minimal expenses, time and money.

This research study employed a descriptive design. Forms for data collection were used to collect quantifiable analytical data. Cooper & Schindler (2011) defines descriptive research as a design used to describe the behavior or characteristics of a studied population. In this approach, the researcher has no control over variables and only objectively reports what has happened and tries to find out the causes and conduct of these variables. This design is appropriate to the study aimed at determining the relationships between the capital allowances and the financial performance of the Kenya manufacturing firms.

The research design was considered appropriate for this study as it helped in an in-depth investigation to examine capital allowances and their influence on financial performance NSE listed manufacturing firms in Kenya. This research design allowed a detailed description and analysis of the variables under study; descriptive design allows the description and presentation of their accurate profiles as it exists without influencing it in any way and explaining their relationship without manipulation as supported by Saunders et al. (2009).

Further explanatory research design produces results that are holistic, contextual and rich in detail on the subject of the study. This research design allowed an inductive and deductive reasoning to arrive at generalization of the study findings on the influence of capital allowance on the financial performance of NSE listed manufacturing firms in Kenya.

3.3 Target Population of the Study

Mugenda and Mugenda (2003) defined the population as having a common characteristic in any area of research for the entire group of persons or items under evaluation. In this research study, the target population was all nine companies in the NSE in the manufacturing sector (appendix 1). No sampling was carried out because the population is not too large and therefore fully covered. A census was carried out for all the nine manufacturing firms listed at the NSE.

3.4 Sampling Frame

A sampling frame, according to Schindler and Cooper (2001), consists of a list of people from which the researcher uses information about the study to be obtained. In general, it is possible to divide sampling frames into two types, list and non-list. Examples of list frames include a list of enrolled voters in a city, residents listed in a local telephone directory, or a list of enrolled students in a course.

A sampling frame includes a numerical identifier for each individual, plus other identification information about individual characteristics, to assist in analysis and allow division into additional frames for further analysis. Since the number of manufacturing companies are not many, the study used a census. This consisted of all 9 companies in the manufacturing sector listed at the NSE

3.5 Data Collection Instruments

In this research study, secondary data was used. From past financial reports and tax returns submitted to Nairobi Securities Exchange and audited annual reports posted in the various companies' websites.

From the annual reports, the relevant data was tabulated in Microsoft Excel for data analysis. The data collected included the net income levels for each of the companies for the financial performance calculation as a dependent variable and the capital allowances that represent independent variable data extracted from tax returns to the NSE and audited annual reports. The ten-year period data from 2010 to 2019 was considered sufficient to address events that might influence trends and relationships in any particular year. This data was collected in the month of July 2020 and calculations were made to determine the research objectives.

3.6 Data Analysis

Data analysis was done using quantitative data from the audited annual financials. This was done through panel data technique to determine the effect of capital allowances on financial performance of manufacturing firms listed in NSE in Kenya. The relationship between the dependent and independent variables was then identified. The data was analyzed with E-views software output version 7.1. Tables were used to show the impact on the variable dependent of the respective independent variables to present model results. It was used as a correlation analysis to show whether and how strongly the financial performance of NSE-listed manufacturing companies relates to capital allowances (Kuria, 2017). The regression coefficients were interpreted using the E-views software output and to ensure that enough degrees of freedom was established, annual data covering the entire period under study was collected.

3.6.1 Justification for use of Panel Data Approach

Due to the existence of time series and cross-sectional data element, panel technique is referred as pooled or combined data. This method has several advantages as it relates individuals over time thereby being bound to heterogeneity in these units (Damodar et al. 2013). Panel data regression controls heterogeneity of cross-section units over time by allowing for individual specific variables (Baltagi, 2001).

Panel data has also a better comparison and gives more informative, more variability with less collinearity among the variables, more degree of freedom and is more efficient due to its characteristics of combining time series of cross-sectional observations (Gichamo, 2012).

Also due to the fact that panel data considers all cross-section units as heterogeneous, it gives unbiased estimations of time invariant and state invariant variables, which we observe, or not. This characteristic minimizes biasness that might arise if the study aggregate individuals into broad categories.

3.6.2 Descriptive Statistics

As the study aims to determine the spread of the data which included calculation of the mean, standard deviation, standard errors, maximum and minimum values of the variables overtime, descriptive statistics was essential in determining statistical properties of the model so as to select the proper functional form of the estimable model. This also necessitates finding of correlation matrix to check which variables were highly correlated to avoid the problem of multi-collinearity common in time series data

3.6.3 Choice of Model: Testing for the Validity of the Fixed Effects Model

Panel data employs three more-or-less independent approaches. These includes;

(a) Pooled panels; assumes no unique attributes of individuals within the measurement set, and no universal effects across time.

(b) Fixed effects models; assumes unique characteristics of individuals that are not the results of random variation and that do not vary across time. It assumes differences in intercepts across groups or time periods.

(c) Random effects models; assumes unique, time constant characteristics of individuals that are the results of random variation and do not correlate with the individual regressors. This model is important where we want to draw conclusions about the entire population and not only the samples.

The objective of the study influences the choice of the appropriate model and the problems concerning the exogeneity of the explanatory variables. Fixed effects models and Random Effects Models will be employed in this analysis as pooled regression model assumes that all the manufacturing firms listed in NSE are the same which is not the case. The second model caters for the heterogeneity or individuality among the manufacturing firms by allowing each manufacturing firm to have its own intercept value which is time invariant. As to which model to employ between fixed and random, the study will adopt the Hausman test.

3.6.3.1 Hausman Test

A common assumption in panel data designs is that each entity has its own individual characteristics that may or may not influence the independent variables and there are two regression models designed control individual effects (Park, 2011). The distinction between the two models is whether the unobserved individual effect are correlated with the independent variables in the model (Bruderl, 2005). Under FE model the assumption is that the individual specific effect is correlated with the independent variable and therefore, the outcome variable (Y) is assumed to be influenced by explanatory variables which are not observable but correlated with the observed explanatory variables (Schmidheiny, 2013; Park, 2011).

Under FE models is assumed that specific characteristics do not change over time and therefore the entity's error term and the constant captures individual characteristics. Bruderl (2005) argues that the FE model is designed to remove the effect of those individual characteristics from the predictor(X) variables so that a researcher can assess the predictors' net effect on the Y variable. In contrast, it is assumed under the RE models that characteristics from individual entities, group or time-specific variations, might be uncorrelated with the independent variables (Bruderl, 2005). The variation across entities is assumed to be random and uncorrelated with the independent variables included in the model.

Given the two options of models applicable in analyzing panel data a researcher has to choose which model (FE or RE) is more relevant and significant. The appropriate approach of choosing between FE and RE is running a Hausman specification test to determine the more efficient model (Borensteinaet al., 2010; Koskinen, 2012). The procedure involves running both the FE and the RE regression models, saving the estimates, and testing whether the error term (ε_i) is correlated with the independent variables.

Under the test, the null hypothesis is that there is no significant correlation between the individual effects and the independent variables. A rejection of the null hypothesis confirms the argument in favour of the FE against the RE model. A Hausman test was carried out to determine whether to use the FE or RE model to address objectives of this study.

3.6.4 Analytical Model

The data analysis model was tested using cross-validation. This is a popular technique that is used to evaluate and validate data analysis models. In cross-validation, the historical data is split into X numbers of subsets. Each time a subset is chosen to be used as test data; the rest of the subsets are used as training data. Then, on the next run, the former test set becomes one of the training sets and one of the former training sets becomes the test set. The process continues until every subset of that X number of sets has been used as a test set.

The study hypotheses were measured using one panel data regression equation. The equation has Profit After Tax (PAT) as the dependent variable and Industrial Building Allowance (IBA), Investment Deduction Allowance (IDA), Wear and Tear Allowances (WTA) as independent variables. The regression analysis will be run using E-views 7 data analysis software.

The hypotheses will be tested using the following regression model;

$PAT_{it} = \alpha + \beta_1 IBA_{it} + \beta_2 IDA_{it} + \beta_3 WTA_{it} + \mu_{it}$

Where;

PAT_{it} = Profit After Tax at time t

IBA_{it} = Industrial Building Allowance at time t

WTA_{it} = Wear and Tear Allowance at time t

α = Is the intercept

β_i= Is the parameter of explanatory variables of IBA, IDA, and WTA

μ_i = Is the disturbance term

The equation log transformed is as follows;

$LnPAT_{it} = \alpha + \beta_1 LnIBA_{it} + \beta_2 LnIDA_{it} + \beta_3 LnPTA_{it} + \mu_{it}$

Where;

Ln = the natural logs of the variables

3.6.5 Unit Root Tests

To avoid inappropriate model specification and increase the confidence of the results, time series properties of the data were investigated. From the numerous methods used to test for stationarity and the presence of unit roots, this study used the Augmented Dickey-Fuller (ADF) test. By definition a series is stationary if it has a constant mean and a constant finite variance. On the contrary, a non-stationary series contains a clear time trend and has a variance that is not constant overtime. If a series is non-stationary, it will display a high degree of persistence.

CHAPTER 4 : RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the research findings ' data analysis and interpretation. The purpose of this study was to determine the effect of capital allowances on financial performance of NSE listed manufacturing firms. The study was conducted over a period of 10 years in which secondary data were used in the analysis for the period 2010 to 2019. The study used regression analysis to analyze the data

4.2 Descriptive Statistics

A normally distributed curve or data assumes a Kurtosis value of 3. A kurtosis value above 3 is a kleptokurtic curve while a kurtosis value below 3 is a mesokurtic curve. A normally distributed curve/data assumes a skewness value of zero and equally distributed errors between the two tails. A probability value of more than 0.1 signifies a normally distributed curve. A Jarque-Bera value close to zero signifies a normally distributed curve. All the variables were found not to be normally distributed because their probability values were less than 0.1 and Jarque-Bera values far from zero.

Table 4.1: Descriptive Statistics

	PAT	IBA	IDA	WTA
Mean	-4.13E+08	2953145.	1.10E+08	32480147
Median	8810385.	0.000000	0.000000	6334355.
Maximum	2.53E+09	46842928	8.71E+09	2.42E+08
Minimum	-1.51E+10	0.000000	0.000000	0.000000
Std. Dev.	2.01E+09	9911640.	9.21E+08	53213960
Skewness	-4.953643	3.822227	9.206843	2.120221
Kurtosis	34.29114	16.48084	86.45985	7.384610
Jarque-Bera	4039.836	900.6406	27392.29	139.5231
Probability	0.000000	0.000000	0.000000	0.000000
Sum	-3.72E+10	2.66E+08	9.93E+09	2.92E+09
Sum Sq. Dev.	3.58E+20	8.74E+15	7.55E+19	2.52E+17
Observations	90	90	90	90

4.3 Correlation Analysis

Correlation analysis was conducted to ensure the variables were not highly correlated. IDA had a correlation coefficient of 0.02 signifying a weak positive correlation with PTA. IBA and WTA had correlation coefficients of -0.35 and -0.25 respectively signifying weak negative correlations with PAT.

Table 4.2: Covariance Analysis

Correlation	PAT	IBA	IDA	WTA
PAT	1.000000			
IBA	-0.353800	1.000000		
IDA	0.022817	0.183424	1.000000	
WTA	-0.247485	0.566435	0.217227	1.000000

4.4 Unit root tests

Unit root tests at Intercept and Level I (0)

4.4.1 Profit after Tax

PAT was found to be stationary at Intercept and level I (0) because the Levin, Lin & Chu t* Statistic had a probability value of 0.0016 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that PAT has a unit root.

Table 4.3: Panel Unit root test - PAT

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-2.94703	0.0016	9	78
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-0.52084	0.3012	9	78
ADF - Fisher Chi-square	21.8396	0.2392	9	78
PP - Fisher Chi-square	19.9212	0.3373	9	81

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.4.2 Industrial Building Allowance

The Levin, Lin & Chu t* statistic for IBA was -0.24 with an insignificant probability value of 0.4054. Therefore, we accept the null hypothesis that IBA has a unit root.

Table 4.4: Panel unit root test - IBA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0
Newey-West automatic bandwidth selection and Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-0.23950	0.4054	4	36
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	0.57117	0.7161	4	36
ADF - Fisher Chi-square	5.28980	0.7262	4	36
PP - Fisher Chi-square	5.08257	0.7487	4	36

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.4.3 Industrial Building Allowance

The Levin, Lin & Chu t* statistic for IDA had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that IDA has a unit root.

Table 4.5: Panel root test – IDA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-166.166	0.0000	2	17
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-68.5408	0.0000	2	17
ADF - Fisher Chi-square	23.1815	0.0001	2	17
PP - Fisher Chi-square	6.91457	0.1405	2	18

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.4.4 Wear and Tear Allowance

The Levin, Lin & Chu t* statistic for WTA was 0.05 with an insignificant probability value of 0.5205. Therefore, we accept the null hypothesis that WTA has a unit root.

Table 4.6: Panel unit root test – WTA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	0.05153	0.5205	8	69
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	1.83521	0.9668	8	69
ADF - Fisher Chi-square	11.6901	0.7650	8	69
PP - Fisher Chi-square	10.5915	0.8340	8	72

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.5 Unit root tests at Intercept and Level I (I) First difference

Notations;

D_ = First difference of…..

4.5.1 Profit After Tax

PAT was found to be stationary at first difference I (I) because the Levin, Lin & Chu t* Statistic had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that PAT has a unit root.

Table 4.7: Panel unit root test at intercept – D_PAT

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-6.84522	0.0000	9	71
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.86950	0.0001	9	71
ADF - Fisher Chi-square	51.6022	0.0000	9	71
PP - Fisher Chi-square	62.5023	0.0000	9	72

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.5.2 Industrial Building Allowance

The Levin, Lin & Chu t* statistic for IBA had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that IBA has a unit root at first difference I(I).

Table 4.8: Panel unit root test at intercept – D_IBA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0
Newey-West automatic bandwidth selection and Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-4.42232	0.0000	2	16
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.11220	0.0173	2	16
ADF - Fisher Chi-square	12.7286	0.0127	2	16
PP - Fisher Chi-square	13.9689	0.0074	2	16

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.5.3 Industrial Building Allowance

IDA was found to be stationary at first difference I (I) because the Levin, Lin & Chu t* Statistic had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that IDA has a unit root.

Table 4.9: Panel unit root test at intercept – D_IDA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 1
Newey-West automatic bandwidth selection and Bartlett kernel
Balanced observations for each test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-68.2718	0.0000	2	14
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-39.3981	0.0000	2	14
ADF - Fisher Chi-square	29.8160	0.0000	2	14
PP - Fisher Chi-square	26.3134	0.0000	2	16

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.5.4 Wear and Tear Allowance

The Levin, Lin & Chu t* statistic for WTA had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that WTA has a unit root at first difference I(I).

Table 4.10: Panel unit root test at intercept – D_WTA

Exogenous variables: Individual effects
Automatic selection of maximum lags
Automatic lag length selection based on SIC: 0 to 1
Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-7.76573	0.0000	8	60
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.94787	0.0000	8	60
ADF - Fisher Chi-square	51.9472	0.0000	8	60
PP - Fisher Chi-square	70.8699	0.0000	8	64

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

4.6 Panel regression equation (Ordinary Least Squares)

Hausman test

The Chi-square test statistic was 0.453784 with an insignificant probability value of 0.9289. This therefore meant that the null hypothesis was rejected in favor of the Random effects model. Therefore, we accept the Random effects model as suitable for this study.

Table 4.11: Panel regression equation

Correlated Random Effects - Hausman Test
Equation: EQ1
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.453784	3	0.9289

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
D_IBA	88.811259	87.575391	4.322499	0.5522
D_IDA	0.291523	0.282849	0.000362	0.6487
D_WTA	1.508753	0.833204	3.651529	0.7237

The gradient represented by constant C had a coefficient of 89800450 and an insignificant probability value of 0.7283. This means that jointly the proxies did not influence or affect PAT during the period of study.

Table 4.12: Panel Regression – PAT

Dependent Variable: D_PAT
Method: Panel EGLS (Cross-section random effects)
Date: 09/23/20 Time: 10:07
Sample (adjusted): 2011 2019
Periods included: 9
Cross-sections included: 9
Total panel (balanced) observations: 81
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D_IBA	87.57539	28.53958	3.068560	0.0030
D_IDA	0.282849	0.210956	1.340799	0.1839
D_WTA	0.833204	9.130690	0.091253	0.9275
C	89800450	2.58E+08	0.348701	0.7283

Effects Specification		
	S.D.	Rho
Cross-section random	0.000000	0.0000
Idiosyncratic random	2.32E+09	1.0000

Weighted Statistics			
R-squared	0.123717	Mean dependent var	71484713
Adjusted R-squared	0.089576	S.D. dependent var	2.31E+09
S.E. of regression	2.20E+09	Sum squared resid	3.73E+20
F-statistic	3.623725	Durbin-Watson stat	2.181396
Prob(F-statistic)	0.016678		

Unweighted Statistics			
R-squared	0.123717	Mean dependent var	71484713
Sum squared resid	3.73E+20	Durbin-Watson stat	2.181396

4.7 Discussion of findings

The findings of the each of the research findings based on the research objectives are discussed below.

4.7.1 Industrial Building Allowances (IBA)

IBA had a coefficient of 87.58 and a significant probability value of 0.0030 which is significant at 5 percent level of significance. This means that when IBA increases by 87.58 percent per year then PAT increases by 1 percent in the same year.

The study found from the regression analysis a strong positive relationship between the financial performance of IBA and NSE-listed manufacturing companies. IBA had the highest effect on the financial performance of the NSE-listed manufacturing companies at 5% importance and 95% confidence. The study also found that the financial performance of manufacturing companies listed in the NSE and IBA from the correlation analysis results was positive. This echoes Alhulali (2014) showing some connection between tax incentives and on sale of eco-friendly vehicles in Japan. Philips (10), also found that tax incentives not only create employment but also encourage self-employed persons to incorporate limited liability firms. It also agrees with Okelle (1995), who noted that a healthy economy can achieve profitability in projects over three to five years through generous tax incentives in the form of capital allowances for corporate taxpayers.

4.7.2 Investment Deduction Allowances (IDA)

IDA had a coefficient of 0.28 and an insignificant probability value of 0.1839. This means that IDA had no significant effect on PAT during the period of study. They had a positive but insignificant relationship.

The study revealed a weak positive relationship between IDA and NSE manufacturing companies ' financial performance. IDA had a minimum impact of 5 percent and 95 percent of confidence on the financial performance of NSE-listed manufacturing companies. The study also showed a weak positive correlation between NSE and IDA list manufacturing companies' financial performance. This echoed Ondabu, Muturi, Sifunjo (2016) study on the effects of tax incentives on firms' performance of listed firms in Kenya. The findings showed tax incentives have insignificant effect on NSE performance.

4.7.3 Wear and Tear Allowances (WTA)

WTA had a coefficient of 0.83 and an insignificant probability value of 0.9275. This means that WTA had no significant effect on PAT during the period of study. They had a positive but insignificant relationship.

The study revealed a weak link between WTA and NSE listed manufacturing companies' financial performance. This echoed Ondabu, Muturi, Sifunjo (2016) study on the effects of tax incentives on firms' performance of listed firms in Kenya. The findings showed tax incentives have insignificant effect on NSE financial performance.

4.7.4 Financial Performance (PTA)

Descriptive statistics show that the average fiscal incentives have a positive impact on the financial performance of the manufacturing companies listed in the NSE. The study also showed that independent variables influenced financial performance by 87.5%; capital allowances: Industrial Building Allowance (IBA), IDA and Wear and Tear Allowance (WTA). The remaining 12.5 percent of this study did not cover financial performance.

Companies eligible for tax incentives pay less tax and thus post higher return on assets and return on equity derived from after-tax profit (Ohaka & Agundu, 2012). Capital allowances also make investments more attractive and in turn increase a company's profitability. Measures for financial performance serve as a basis for evaluating a corporate entity's performance. Capital allowances increase the return on capital and thus increase the company's profitability.

CHAPTER 5 : SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes and presents the research results of the study with particular reference to the aims and research questions of the study used as analytic units. Data were interpreted and the findings were correlated with the empirical and theoretical literature available. The conclusion relates directly to the specific goals and questions of the research. The recommendations were then drawn from the inferences and discussion of the research results.

5.2 Summary of the Findings

From the data analysis, the study found that there was a positive association with financial performance and capital allowances granted to companies listed in the NSE. This indicates that their financial performance also increases as tax incentives are awarded up to NSE-listed manufacturing firms. The study demonstrates that there was a 87.5% variation in the financial performance of manufacturing firms listed in the NSE due to changes in IBA, IDA and WTA from the research findings on the R square. The study also revealed that the study variables had a strong positive relationship. From the ANOVA findings, the study found that IBA, IDA, and WTA had a positive impact on the performance of the NSE-listed manufacturing companies. These findings are in line with Onyango's (2015) research findings, which found a positive relationship between tax incentives and five-star hotel financial performance in Nairobi County.

5.3 Conclusion

The study revealed that the increase in IBA and WTA has had a positive impact in NSE-listed manufacturing companies ' financial performance, albeit by a small margin. This was indicated by the regression and correlation analysis that the financial performance of manufacturing companies listed by IBA, WTA and NSE was weak. The study also found that IBA had a

positive impact on the financial performance of NSE-listed manufacturing companies. Furthermore, the study reveals that the increase in IBA, IDA and WTA had a positive effect on the financial performance of NSE manufacturing companies. Companies should capitalize on their asset efficiency to achieve a higher financial performance. Consequently, this study concludes that capital allowances have a positive effect on manufacturing companies ' financial performance in NSE.

5.4 Policy Recommendations

5.4.1 Recommendation on Industrial Building Allowances (IBA) and financial performance

From the research findings, the study recommends that the government review the IBA provision, which showed that an increase in its unit would result in a considerable increase of its financial performance. The study also showed that there are massive amounts of investments not eligible for IBA, so that IBA qualifying investment thresholds must be revised. It is also important for the government and the national treasury to develop adequate systems for the collection of accurate data in order to monitor and take appropriate decisions with respect to IBA or other capital allowances. An effective unit to collect and analyze specific relevant IBA data and other incentives granted to manufacturers in Kenya, should be set up as far as possible. This will minimize the state's lack of tax incentive data.

5.4.2 Recommendation on Investment Deduction Allowance (IDA) and financial performance

From the research findings, the study recommends that the government review the IDA provision, which showed that an increase in its unit would result in a very small increase of its financial performance. The study also showed that there are massive amounts of investments not eligible for IDA, so that IDA qualifying investment thresholds must be revised.

It is also important for the government and the national treasury to develop adequate systems for the collection of accurate data in order to monitor and take appropriate decisions with respect to IDA or other exemptions. An effective unit to collect and analyze specific relevant IDA data and other incentives granted to manufacturers in Kenya, should be set up as far as possible. This will minimize the state's lack of tax incentive data.

5.4.3 Recommendation on Wear and Tear allowance (WTA) and financial performance

The study recommends the government's need to promote WTA to improve the financial performance of NSE-listed manufacturing companies. Furthermore, there has been a weak link between WTA's financial performance and manufacturing companies in the NSE list.

The Government and the National Treasury shall also introduce appropriate systems to collect accurate WTA data or other monitoring and appropriate decision-making exemptions. Wherever possible, an effective unit for the specific collection and analysis of WTA data and other incentives given to manufacturing companies in Kenya should be developed. This will minimize the insufficiency of state tax incentive decisions.

5.5 Suggestions for Further Research

The study attempted to determine the effects of capital allowance on the financial performance of manufacturing companies listed on the Nairobi Securities Exchange. We recommend another study on the effects of capital allowances on the financial performance of manufacturing companies which are not listed on the Nairobi Securities Exchange.

Research can also be carried out to determine whether such incentives as capital allowances provided by the Kenyan Government are economically sustainable given that these incentives amount to hundreds of millions per year. A study may also be carried out to determine how effective the KRA has been in implementing tax legislation and in monitoring the tax deductions, remissions or refunds claimed by business entities over the years. Other companies in other economic sectors can also undertake further studies.

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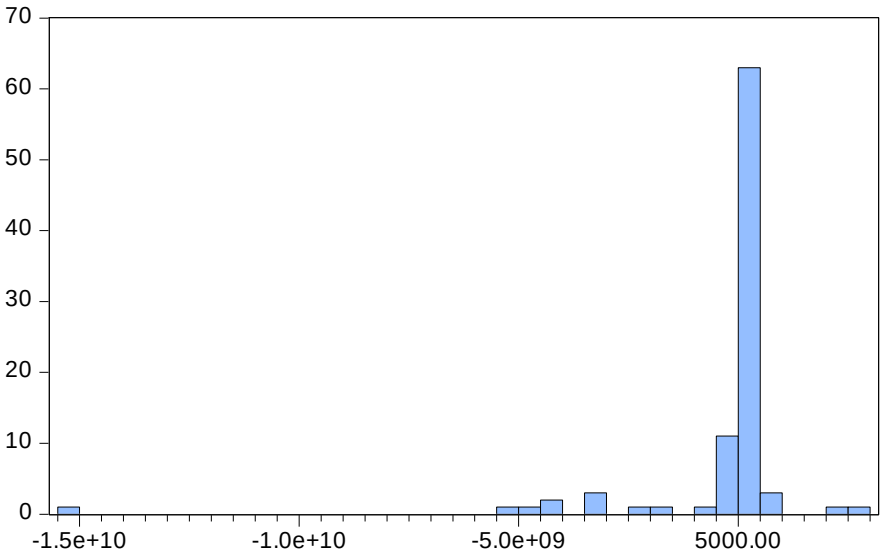
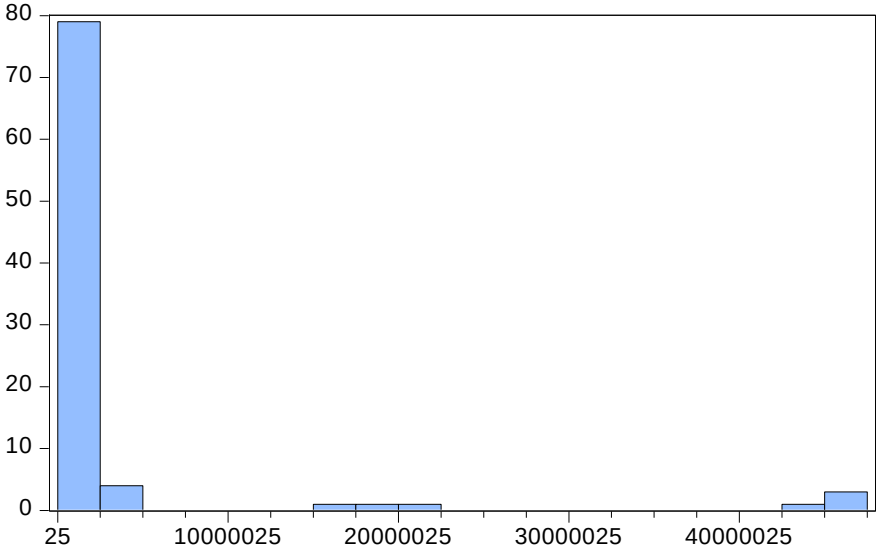
APPENDIX I: CHARTS



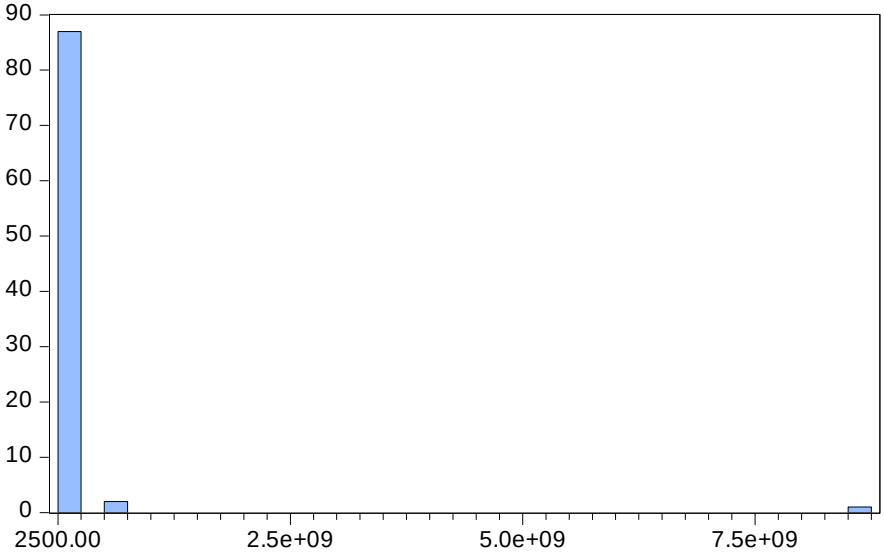
Series: PAT
Sample 2010 2019
Observations 90

Mean	-4.13e+08
Median	8810385.
Maximum	2.53e+09
Minimum	-1.51e+10
Std. Dev.	2.01e+09
Skewness	-4.953643
Kurtosis	34.29114
Jarque-Bera	4039.836
Probability	0.000000



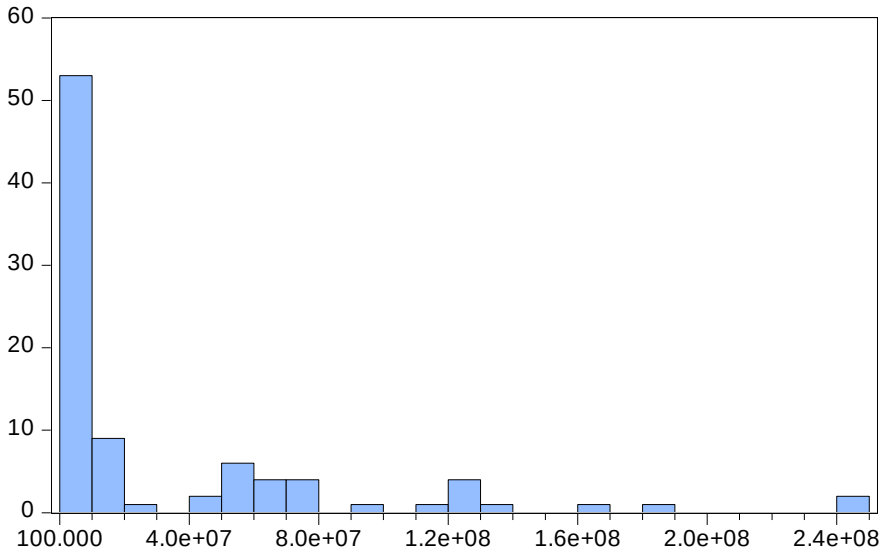
Series: IBA
Sample 2010 2019
Observations 90

Mean	2953145.
Median	0.000000
Maximum	46842928
Minimum	0.000000
Std. Dev.	9911640.
Skewness	3.822227
Kurtosis	16.48084
Jarque-Bera	900.6406
Probability	0.000000



Series: IDA
Sample 2010 2019
Observations 90

Mean	1.10e+08
Median	0.000000
Maximum	8.71e+09
Minimum	0.000000
Std. Dev.	9.21e+08
Skewness	9.206843
Kurtosis	86.45985
Jarque-Bera	27392.29
Probability	0.000000



Series: WTA
Sample 2010 2019
Observations 90

Mean	32480147
Median	6334355.
Maximum	2.42e+08
Minimum	0.000000
Std. Dev.	53213960
Skewness	2.120221
Kurtosis	7.384610
Jarque-Bera	139.5231
Probability	0.000000

APPENDIX II: NSE Listed manufacturing firms in Kenya

1. B.O.C Kenya Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**1,189,082**	**0**	**49,482,454**	**135,504,497**
2011	**1,179,889**	**0**	**46,472,063**	**192,854,665**
2012	**1,179,889**	**0**	**53,210,272**	**336,918,076**
2013	**1,222,089**	**0**	**51,863,975**	**350,392,768**
2014	**1,222,089**	**0**	**72,917,033**	**270,803,729**
2015	**0**	**0**	**65,794,313**	**254,398,216**
2016	**0**	**0**	**76,653,861**	**162,437,716**
2017	**0**	**0**	**73,109,556**	**124,378,831**
2018	**0**	**0**	**66,919,390**	**72,476,304**
2019	**0**	**0**	**72,334,907**	**58,550,841**
2. British American Tobacco Kenya Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**0**	**0**	**16,206,675**	**61,924,991**
2011	**0**	**0**	**12,639,687**	**289,894,082**
2012	**0**	**0**	**10,399,326**	**156,470,760**
2013	**0**	**0**	**12,854,812**	**270,968,344**
2014	**0**	**0**	**10,972,662**	**46,939,606**
2015	**0**	**0**	**8,437,703**	**138,412,315**
2016	**0**	**0**	**8,185,861**	**164,603,127**

2017	**0**	**0**	**6,436,968**	**263,079,916**
2018	**0**	**0**	**4,648,998**	**261,562,503**
2019	**0**	**0**	**3,725,778**	**632,152,047**
3. Carbacid Investments Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**0**	**0**	**0**	**51,400,658.00**
2011	**0**	**0**	**0**	**10,940,604.00**
2012	**0**	**0**	**0**	**36,176,543.00**
2013	**0**	**0**	**0**	**57,917,745**
2014	**0**	**0**	**0**	**73,436,544**
2015	**122,108**	**0**	**0**	**-5,673,177**
2016	**3,229,192**	**0**	**0**	**-4,183,284**
2017	**3,229,192**	**0**	**36,906**	**-5,484,936**
2018	**3,229,192**	**0**	**17,418**	**14,313,664**
2019	**3,229,192**	**0**	**115,991**	**-26,107,000**
4. East African Breweries Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**0**	**0**	**29,867,329**	**167,878,019**
2011	**0**	**0**	**59,169,139**	**554,200**
2012	**0**	**0**	**65,184,433**	**-2,257,332,651**
2013	**0**	**0**	**58,285,905**	**-3,326,287,155**
2014	**0**	**0**	**52,217,439**	**803,670,735**

2015	**0**	**0**	**61,507,438**	**-513,558,640**
2016	**0**	**0**	**121,588,303**	**-4,444,864,938**
2017	**0**	**0**	**139,202,890**	**873,153,744**
2018	**0**	**0**	**55,618,783**	**2,267,544,677**
2019	**0**	**0**	**120,869,380**	**2,526,252,437**
5. Mumias Sugar Co. Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**15,454,214**	**583,607,568**	**117,802,376**	**- 3,175,293,618**
2011	**20,495,984**	**586,787,008**	**128,201,753**	**11,714,000**
2012	**18,047,986**	**8,713,719,941**	**129,176,611**	**171,018,085**
2013	**44,638,628**	**0**	**241,629,422**	**- 1,660,406,000**
2014	**0**	**0**	**240,830,069**	**- 4,483,099,584**
2015	**46,842,928**	**0**	**182,057,142**	**- 4,644,801,000**
2016	**46,760,880**	**0**	**169,899,541**	**- 3,497,271,464**
2017	**45,924,025**	**0**	**14,155,360**	**- 5,152,739,966**
2018	**0**	**0**	**2,336,904**	**-15,141,253,000**
2019	**0**	**0**	**0**	**0**
6. Eveready East Africa Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**1,431,076.00**	**11,293,438.00**	**12,241,932.00**	**23,522,566.00**

2011	**1,431,076.00**	**29,801,562.00**	**10,222,653.00**	**1,420,931.00**
2012	**1,431,076.00**	**2,894,652.00**	**8,127,859.00**	**2,917,551.00**
2013	**1,431,076**	**2,292,613**	**91,462,509**	**8,496,212**
2014	**1,431,076**	**0**	**11,684,028**	**41,735,725**
2015	**1,431,076**	**0**	**9,346,305**	**-201,509,000**
2016	**0**	**0**	**7,724,757**	**-232,031,821**
2017	**0**	**0**	**7,144,047**	**-223,797,228**
2018	**0**	**0**	**5,910,946**	**-148,355,699**
2019	**0**	**0**	**4,455,833**	**-80,842,334**
7. Kenya Orchards Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**0**	**0**	**0**	**561,798**
2011	**0**	**0**	**214,817.00**	**2,323,702.00**
2012	**0**	**0**	**214,818.00**	**1,354,633.00**
2013	**0**	**0**	**186,845**	**1,697,496**
2014	**0**	**0**	**807,322**	**-25,261,547**
2015	**0**	**0**	**144,944**	**5,658,203**
2016	**0**	**0**	**126,442**	**5,984,230**
2017	**0**	**0**	**1,415,936**	**9,124,557**
2018	**0**	**0**	**2,035,119**	**13,466,715**
2019	**0**	**0**	**1,585,897**	**6,654,400**

8. Flame Tree Group Holdings Ltd				
YEAR	**IBA**	**IDA**	**WTA**	**NET INCOME**
2010	**0**	**0**	**2,004,014.00**	**3,523,246.00**
2011	**0**	**0**	**1,381,204.00**	**2,958,721.00**
2012	**0**	**0**	**2,126,620.00**	**3,704,242.00**
2013	**0**	**0**	**1,699,992**	**17,457,812**
2014	**0**	**0**	**2,710,631**	**6,003,866**
2015	**0**	**1,429,740**	**3,742,155**	**11,305,388**
2016	**0**	**0**	**3,704,141**	**151,162,541**
2017	**0**	**0**	**5,577,648**	**-47,770,633**
2018	**0**	**0**	**6,890,621**	**-43,440,709**
2019	**0**	**0**	**6,231,741**	**-35,732,624**