

Effect of Tax Incentives on Financial Performance among Manufacturing Firms in Kenya (A Case of Industrial Area, Nairobi)

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Abstract

Tax incentive is a strategy employed by governments world over to attract investments in varied sectors of their economies. The main objective of this study was to examine the effect of tax incentives on financial performance of manufacturing firms in Kenya, taking manufacturing firms in Nairobi industrial area as a case study for 10 years. The study was guided by the following specific objectives: to find out how capital allowance affect financial performance of manufacturing companies in Kenya, to establish the effect of allowable deductions on financial performance of manufacturing companies in Kenya and to investigate effects of investment deductions on financial performance of manufacturing companies in Kenya. The study adopted deterrent theory, ability to pay theory, and agency theory. The study employed a descriptive research design, using stratified sampling methods. The study's target population was manufacturing companies in Kenya specifically in the Nairobi Industrial Area across all the categories as listed by the Kenya Association of Manufacturers directory as at 2022. The study collected secondary quantitative data which was analysed using descriptive statistics (means and standard deviations) and inferential statistics (correlation analysis) to determine the relationships between the independent variables and the dependent variable. Tables and figures were used to present the analysis output. The findings indicated that tax incentives had a significant positive effect on financial performance, as they reduced the cost of capital for manufacturing firms, promoted innovation and competition, and led to increased productivity and efficiency. Based on these findings, the study recommended that the Kenyan government should continue to provide tax incentives to manufacturing firms and tailor them to the specific needs of each firm, while also encouraging innovation and competition in the sector through support for research and development, technology transfer, and training programs. Manufacturing firms are also encouraged to take advantage of the tax incentives to invest in capital-intensive projects and acquire capital assets. However, there is a need to review the current tax laws to make the tax incentives more flexible and attractive to potential investors, and to consider increasing the amount of tax incentives to further reduce the cost of capital for manufacturing companies.

Keywords: Tax incentives, financial performance

1. Introduction

1.1 Background of the Study

Industrialization culminates from the sustenance of the productivity of firms over a period. It brings about increased household consumption through improvement in the value of product and price efficiency, and the development of other primary sectors through backward linkages that come with the demand for intermediate goods (Rapuluchukwu et al., 2016). Despite identified benefits, most African countries have relied heavily on primary products as their main export commodity (UNECA, 2013) and the productivity of other sectors, (other than agriculture) such as the manufacturing sector have remained a source of concern to both policy and research communities. For instance, there have been several calls for structural transformation of African economies from low value-added activities and sectors to higher value-addition (IMF, 2012).

Many large manufacturing firms often relocate or restructure their operations, citing turbulent operating environment and high operating costs, opting to serve local markets through imports from low-cost manufacturing areas, resulting in job losses (Nyabiage & Kapchanga, 2014). Tax experts posit that meaningful economic expansion in any country must be backed by critical and well-intentioned initiatives including robust tax incentives for the taxpayer both at the individual and organizational levels (Bird, 2012). To promote growth and investment in the manufacturing sector, governments have put in place various tax incentives including tax holidays, tax reduction, capital allowances and also incentives on export processing zones. Most of the tax incentives targeting the manufacturing sector are meant to rejuvenate the ailing sector and increase the survival rates of firms in the sector thereby retaining and creating additional employment opportunities to thousands of unemployed people (Fakile & Uwuigbe, 2013).

Tax incentives discriminate against small businesses by putting them at a disadvantage while competing against big businesses which have access to sophisticated channels to help them exploit tax incentives (Padilla et al, 2020). Furthermore, foreign investors, which are mostly the target of tax incentives, prioritize structural factors such as skilled labour, infrastructure, and political environment other than tax incentives. Matters are often complicated by the fact that in case of foreign companies, tax incentives are sometimes more beneficial to their home countries than to individual firms (Githaiga, 2013).

There are approximately 1,072 manufacturing companies in Kenya, making a very significant contribution to the economy of the country according to Kenya Association of Manufacturers (KAM) statistics. The manufacturing sector is crucial to the Kenyan economy and currently contributes about 9% of the national GDP. It is anticipated to improve to 15% in 5 years' period, beside making significant contribution to job creation. (KIPPRA, 2018). Tax incentives, besides other government initiatives are necessary in encouraging growth of the manufacturing industries, reducing imports and boosting business opportunities locally. Tax incentives is also intended to reduce cost of running business ultimately mitigating against unnecessary interruptions.

The intended benefits of tax incentives are however negated by other structural factors including unfavourable operating environment brought about by inadequate infrastructure, high operational costs and unpredictable political environment making it difficult for the firms to finance capital projects aimed at expansion (Fowowe, 2013). Other impediments to growth of manufacturing firms include excessive taxation arising from high tax rates, ambiguity is differentiation of the general tax structure provisions from those issued under special circumstances, and lack the capacity to adopt targeted tax incentives.

1.1.1 Global Perspective

According to United Nations (2014), Tax incentives are government-initiated provisions in the tax code that grant specific privileges, such as tax credits, deductions, exemptions, or preferential tax rates, to individuals, corporations, or industries in order to encourage targeted economic behaviors or investments while adhering to policy objectives. Tax incentives can take the form of tax holidays, investment allowances and tax credits, accelerated depreciation, special zones, investment subsidies, tax exemptions, reduction in tax rates and indirect tax incentives. Hence, tax incentives can be defined as fiscal measures that are used to attract local or foreign investment capital to certain economic activities or particular areas in a country.

McGill & Nonthachote (2016) define tax incentives are government-sponsored provisions in the tax code designed to provide fiscal benefits, such as tax deductions or credits, to encourage specific economic activities, investments, or behaviors, while supporting policy objectives. Leyrat, (2012) argues that tax incentives are a set of financial incentives, primarily in the form of reduced tax liabilities, offered by governments to stimulate desired economic behaviors, such as investment, job creation, or research and development. Ifueko (2009) describes tax incentive as special arrangement in tax laws to: stimulate growth in specific areas, attract, retain or

increase investment in a particular sector, assist companies or individuals carrying on identified activities. They include measures specifically designed either to increase the rate of return of a particular sector, or to reduce (or redistribute) its cost or risks. According to Clark et al. (2007), tax incentives are much easier to provide than to correct deficiencies in the system, for example, in infrastructure or skilled labour they do not require an actual expenditure of funds or cash subsidies to investors. They are therefore, politically easier to provide than funds.

The grant of tax incentives, in whatever form, constitutes preferential taxation because of their selective nature of application (Sally & Shelly, 2010). That is, they are tailored to only benefit a selected group of taxpayers such as capital investors who are considered more beneficial to a nation's economy than other taxpayers are, a move some have termed financial carrot dangling (Murage, 2012). 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 losses and benefits to the economy (Arzizeh et al, 2013).

Tax incentives are monetary measures that are utilized to draw in home or oversee investments to certain financial exercises or specific regions in a nation. Tax incentives may take different structures. In the case of Kenya, the pertinent tax incentives include, exemption from paying tax for some few years after start up, allowances for investments related expenses, tax credits, accelerated devaluation policies, unique zones, subsidized investments, tax exemptions, decreased rates of taxation and indirect tax incentives (Leyrat, 2012).

There are numerous arguments in favour of tax incentives as catalysts for corporate investments. According to Murage, (2012), tax incentives increase returns on investments hence generally enhancing economic development and effectiveness in service delivery by the government. Fowowe, (2013) postulate that tax incentives are a common feature in many developing countries when it comes to encouraging investments, including foreign direct investments in their jurisdictions.

1.1.2 Kenya Perspective

In Kenya, there are a number of tax incentives that are meant to encourage investments in different sectors of the economy (ITA, 2016). These incentives are generally categorized either as investment promotion incentives (IPI) or export promotion incentives (EPI). Investment promotion incentives include Investment Deduction Allowance, introduced in 1991 to encourage investment in physical capital such as industrial buildings, machinery and equipment, Industrial Building Allowance launched in 1974 with the objective of encouraging investment in buildings used for industrial purposes like hotels and manufacturing plants, and Mining Deduction, meant to persuade investors to venture into

the capital-intensive mining industry. Others are Wear and Tear allowance, and Farm Works Deduction which was introduced in 1985 to boost investment in the agricultural sector.

On the contrary, Export promotion incentives program includes three main schemes; the Export Processing Zones (EPZs) which is meant to generate and encourage economic activity and foreign direct investments, and, Manufacture under Bond (MUB) and the Tax Remissions and Exemption Office (TREGO) regimes which were meant to encourage investors to manufacture for export within the country. Additionally, tax incentives in Kenya are offered based on the following sub-categories.

1.1.3 Financial Performance of Manufacturing Firms in Kenya

Financial performance of a firm can be measured by assessing optimal utilization of its assets to generate sales or revenues from its vital businesses. This entails measuring in monetary terms the outcomes of a firm's policies and operations. The dimensions of financial performance are: profitability, growth, and market worth. Profitability measures firm's past ability to generate returns (Glick, 2015). Financial performance of an organization has traditionally been measured by looking at the revenues or the profits made at the end of the year, or using key financial ratios (Wadongo et al., 2010). However, according to McGill & Nonthachote (2016), firm performance is a multi-dimensional construct consisting of revenue and cost-based financial performance, customer-related performance, innovation-related performance and employee-related performance. As evident here, firm performance is not necessarily a self-evident catch-all term.

Careful scrutiny of the aspects of firm performance is recommended to quantify the actual performance achieved by the firm in a business year. The manufacturing sector in Kenya output volume grew by 6.9% in 2021 compared to 0.2% in 2020, contributing 7.2% to gross domestic product (GDP) (KNBS, 2022). On average, however, manufacturing has been growing at a slower rate than the economy, which expanded by 5.6% in 2015. This implies that the share of manufacturing in GDP has been reducing over time. As a result, it can be argued that Kenya is going through premature deindustrialization in a context where manufacturing and industry are still relatively under-developed.

1.1.4 Tax Incentives and Financial Performance of Firms

Governments across the globe use tax incentives to enhance economic activities and investments by firms, they use this form 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, 2009). In Kenya companies including those operating at Export Processing Zones benefit from major tax incentives especially capital allowances such as IBD, ID and W&T allowances by

claiming deductions from their corporate tax liability, this enables such companies to report higher profit after tax leading to higher financial performance.

Additionally, governments use tax incentives to attract private investment in preferred industries, including tourism (Agundu, 2012). Incentives are often granted to offset actual or perceived differences in the cost of doing business in different political jurisdictions whether the cost differences arise from tax differences or from differences in transportation, labour, or other costs (Njuguna, 2015). This acts as a catalyst for improved performance (Philips, 2010). Incentives raise the return on capital thereby making investment in a location more attractive and in turn increase profitability of the firm. According to Ohaka and Agundu (2012), the least discriminatory form of tax incentive is the one that is so designed to increase the rate of return on investment (ROI) by reducing corporate and personal tax rates. According to Institute of Economic Affairs (2012) In some cases, an incentive programme may be restricted to a few selected firms in the same industry (sector), usually those with highly desirable corporate goals (like generation of more value-added through domestic processing, and employment; as well as boosting exports and technology transfer).

In Kenya, the government has put incentives in key sectors among them being the manufacturing sector. EPZs, for instance, are big beneficiaries of the incentives. Numerous tax incentives are provided in Kenya's EPZs, the most significant of which are: 10 year corporate income tax holiday, followed by a 25% rate compared to the standard 30% for the next 10 years and 10 year exemption from all withholding taxes, exemption from import duties on machinery, raw materials, and inputs (Network-Africa & Action Aid International, 2012). On the same hand, inputs such as raw materials, machinery, and office equipment, certain petroleum fuel for boilers and generators and building materials also get perpetual exemption from VAT and customs import duty. According to Njuguna (2015), capital investment allowances have also been offered to those investing in capital projects on a reducing balance. They include industrial building allowances which is granted on capital expenditure incurred on the construction of an industrial building, investment deduction which is granted to encourage development in manufacturing industries and shipping investment deductions granted at a 40 percent on capital expenditure and only one such deduction can be allowed in respect of the same ship. Despite the various tax incentives being made towards these firms, the effect on their financial performance has not been investigated. Hence, this study sought to fill this gap.

1.2 Statement of the Problem

Tax incentives are frequently employed by governments as tools to stimulate economic growth, attract investment, and bolster specific industries (Macharia & Ondabu, 2018). In Kenya, the manufacturing sector holds strategic importance,

contributing significantly to the nation's GDP and employment (Central Bank of Kenya, 2019). The Kenyan government has implemented various tax incentives to foster growth and competitiveness in the sector (Mekonen et al., 2019). However, despite these incentives, the financial performance of manufacturing firms in Kenya remains variable, with some firms thriving while others struggle to remain competitive.

Past research has yielded conflicting findings on the correlation between tax incentives and company profitability in Kenya, with no specific focus on the manufacturing sector. Musyoka (2012) investigated the impact of tax incentives on foreign direct investment (FDI) in Kenya and found that these incentives did not significantly improve investment. While Kimeu (2013) explored the effects of tax reforms on the financial performance of real estate firms in Kenya and identified a positive relationship, this study did not pertain to manufacturing firms. Similarly, Onyango (2015) examined the influence of tax incentives on the financial performance of five-star hotels in Nairobi County, once again deviating from the manufacturing sector.

The gap in research focusing on the impact of tax incentives on the financial performance of manufacturing firms in Kenya underscores the necessity for this study. This research seeks to fill this void by investigating how tax incentives affect the financial performance of selected manufacturing firms in Kenya. As the manufacturing industry is central to the nation's economic well-being, understanding the dynamics of tax incentives within this context can provide critical insights into the industry's growth and sustainability.

1.3 Objectives

1.3.1 General Objective

The main objective of this study was to assess the effect of tax incentives on the financial performance of manufacturing firms in Industrial Area, Kenya for a period covering 2011-2020.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

- i. To find out how capital allowance affect financial performance of manufacturing companies in industrial area, Nairobi Kenya.
- ii. To establish the effect of allowable deductions on financial performance of manufacturing companies in industrial area, Nairobi Kenya.
- iii. To investigate effect of investment deductions on financial performance of manufacturing companies in industrial area, Nairobi Kenya.

1.4 Research Questions

This study was guided by the following research questions:

- i. How does capital allowance affect financial performance of manufacturing companies in industrial area, Nairobi Kenya?

ii. How does allowable deductions affect the financial performance of manufacturing companies in industrial area, Nairobi Kenya?

iii. How do investment deductions influence financial performance of manufacturing companies in industrial area, Nairobi Kenya?

1.5 Significance

1.5.1 Government of Kenya

The government may use the study's results in a number of ways. This research provided light on the challenges and contributing aspects of Kenya's manufacturing industry. The government might use this data to craft policies and regulations to combat the industry's problems, such as rising prices, a hostile business climate, and a shrinking market share.

Finally, the research aided the government in achieving its development objectives, such as the Big Four Agenda's push to boost manufacturing as a primary engine of economic growth and employment creation. The results of this research helped influence policy choices and execution by providing vital information on manufacturing sector financial performance and the efficacy of tax incentives in boosting investment and enhancing financial performance.

1.5.2 Policy Makers

The findings of this study provided policymakers with empirical evidence on the effectiveness of tax incentives in promoting investment and improving financial performance in the manufacturing sector. The research is expected to form the basis of reviewing tax policies and carrying out an evaluation on their effectiveness. A review of the current tax policies can aid in carrying out a cost benefit analysis (CBA) and guiding the policy makers on appropriate incentives.

1.5.3 Manufacturers Firm

The research provided the manufacturing firms with an insight on available tax incentives and how to utilize them in order to increase their savings for future investments. Rise in level of investments in the country is likely to result in rise in level of revenue for the government through taxation.

1.5.4 Future Researchers

The study was also instrumental for researchers and academicians who wanted to get information relating to tax incentives and financial performance of firms. It also was of great use for researchers and students who wanted to review the literature on tax incentives and financial performance.

1.6 Scope of the Study

This study was limited to assessing tax incentives and their influence on financial performance in manufacturing firms in Nairobi Industrial Area (Appendix I). The study covered a period of 10 years (2011-2020). The decision to cover a period of 10 years (2011-2020) in the study of tax incentives and their influence on financial performance in manufacturing firms in Nairobi Industrial Area is based on several major economic

happenings during this period. Firstly, during this period, there were significant changes in tax policies in Kenya, with the introduction of new tax laws and the amendment of existing ones. For example, in 2015, the Kenyan government introduced the Income Tax Act, which introduced new provisions for capital allowances, allowable deductions, and investment deductions. These changes may have had a significant impact on the financial performance of manufacturing firms in the Nairobi Industrial Area, making it relevant to study the effects of these tax incentives over the ten-year period. Secondly, there were major economic events that occurred during this period that may have affected the financial performance of manufacturing firms in the Nairobi Industrial Area. These included significant changes in the political landscape in Kenya, including the adoption of a new constitution in 2010 and the 2013 and 2017 general elections, which may have affected the business environment and hence, the financial performance of manufacturing firms.

The study specifically focused on capital allowance, allowable deductions and investment deductions and how they influence financial performance of selected manufacturing firms in Nairobi Industrial Area. The study targeted 214 manufacturing companies, from where a sample of 50 companies were used. The study adopted a descriptive survey design and adopt a stratified random sampling technique based on industry of operation using secondary data addressing the specific objectives sample of the study. The sample selected manufacturing companies was spread across different areas of specialization.

1.7 Limitations of the Study

The study encountered its first limitation when respondents were unwilling to provide information. Some participants tried to hide certain aspects of their knowledge due to privacy concerns. However, the investigator overcame this issue by obtaining approval from the university to conduct the study and

assuring respondents that their identities remained anonymous and the data was only used for research purposes. The research was also limited by participants' unavailability due to work commitments. The investigator addressed this issue by scheduling the research at appropriate time convenient to the participants

2. Literature Review

2.1 Introduction

This chapter examines relevant literature related to tax incentives and their effect on financial performance of manufacturing companies, especially in the Kenyan context. The chapter also highlights theoretical perspectives used in the study and presents a conceptual framework.

2.2 Theoretical Review

Theories in research enable the scholar to put the topic of study into perspective and help the readers to clearly understand how the research questions are being addressed.

Tax incentives are usually given to the beneficiaries by the government in an effort to boost business growth and investments. The Optimal Tax theory, Tax Discrimination theory, and Normative Theory are adopted in the study.

2.2.1 Deterrence Theory

American sociologist Travis Hirschi, in his 1969 book "Causes of Delinquency," first proposed the concept of deterrence as a criminological theory (Hirschi, 1969). The contributions of other academics including Jack P. Gibbs, Ronald V. Clarke, and Derek Cornish helped bring the idea to the forefront. Hirschi contended that a lack of social ties contributed to criminal behaviour. He did, however, acknowledge that some people are more predisposed to criminal activity than others and that social relationships do not have the same effect on everyone. In response, he advocated the use of punishment and the prospect of punishment to prevent future wrongdoing.

Other researchers like Gibbs, Clarke, and Cornish developed Hirschi's thesis further by concentrating on the part that rational choice plays in criminal conduct. They said that people consider the rewards and drawbacks of criminal behaviour before making a decision to commit a crime. Hence, an individual's propensity to commit an offense may be affected by the severity, predictability, and rapidity of the punishment that they face (Gibbs, 1975). The purpose of deterrence theory is to discourage would-be aggressors from taking any action that might have negative consequences by making it seem as if the costs of acting aggressively would far outweigh any possible rewards (Jervis, 2017). According to this notion, people refrained from damaging behaviour if they believed that they met with negative repercussions as a result. By making prospective aggressors feel uneasy about taking action, deterrence theory works to maintain peace and order on the global stage.

The notion of deterrence had its origins in the nuclear weapons race between the United States and the Soviet Union during the Cold War. At this time, both nations built up their nuclear arsenals to frightening levels in an effort to prevent a nuclear exchange (Cimbala *et al.*, 1989). The idea has developed to account for non-traditional types of aggression including cyberwarfare and terrorism.

Two forms of deterrence make up the theory of deterrence: general and particular. The goal of general deterrence is to dissuade would-be aggressors by making it seem as if the costs of violence would be too high to justify the possible advantages. This is achieved by strengthening military capacities, improving information collecting and sharing, and drafting back-up plans (Jervis *et al.*, 2017). The goal of particular deterrence is to prevent certain people or groups from participating in harmful behaviour. To do this, one must attack the organization where its strength really resides: in its resources, staff, and physical plant (Buzan, 2019).

Accurately analyzing the intentions and capabilities of possible aggressors is a major issue for deterrence theory. Uncertainty may cause a party to misjudge the relative costs and advantages of aggressive behaviour, which can lead to escalation and conflict (Buzan, 2019). Also, prospective aggressors are assumed to be rational agents in deterrence theory, with predictable responses to threats of punishment. Yet, this is not always the case, especially when dealing with non-state entities like terrorist organizations.

As deterrence is the fundamental mechanism via which tax incentives are meant to function, deterrence theory is pertinent to this study. According to this theory, people and businesses are less likely to engage in destructive behaviour when they are concerned about being caught and punished for their actions. To the same objective, tax incentives are put in place to prevent businesses from participating in destructive practices like dodging taxes or moving their operations abroad.

For the purposes of this study, tax incentives function as a sort of general deterrence, with the goal of preventing potentially detrimental actions from being taken by manufacturing companies. Businesses are incentivized to stay in Kenya and contribute to the country's economic progress via the use of various tax incentives, such as capital allowance, allowable deductions, investment deductions among other tax incentives such as tax holidays, investment allowances, and accelerated depreciation.

One of the main goals of this research is to determine whether or not tax incentives have any impact on the financial performance of Kenya's manufacturing companies, with the goal of reducing the prevalence of harmful activities and increasing economic development. Deterrence theory offers a theoretical framework for analyzing the efficacy of tax incentives and the circumstances in which they are most useful. Additionally, deterrence theory may be utilized to determine what variables affect the efficiency of tax incentives in discouraging undesirable behaviour. For instance, tax incentives may not be successful in keeping businesses in Kenya if they believe the risks of investing and operating there exceed the potential rewards. It follows that tax incentives would not be as successful as hoped in discouraging businesses from dodging taxes if the system is seen as arbitrary and unjust.

2.2.2 Ability to Pay Theory

The Ability-to-Pay Theory, first proposed by economist Richard Musgrave in his book "The Theory of Public Finance" in 1959 is a taxation concept that states an individual's tax burden should be proportional to their economic means (Musgrave, 1985). So, it is fair that those with greater salaries pay a larger share of their money in taxes. Economists like Henry George and John Stuart Mill established the notion in the 19th century, and it is still an essential topic in contemporary taxes.

Equality is central to the Ability-to-Pay Hypothesis. This paper argues that taxes should not be regressive, or that those with lower incomes should not be required to pay a larger share of their income in taxes than those with higher incomes. This is due to the fact that individuals with greater earnings can afford to pay higher prices, while those with lower incomes cannot (Slemrod, 1996). Moreover, the argument argues that the rich, who arguably gain the most from society, should foot a larger portion of the bill for public services. A progressive tax system is one approach to put into practice the Ability-to-Pay Thesis. An income tax where the rate rises with earnings is an example of this kind of system. Take the United States' income tax system as an example; it's progressive in that it has multiple tax rates for people of varying incomes. The tax burden as a proportion of income is greater for people with higher earnings (Piketty, 2014).

Several economists and business leaders worry that the Ability-to-Pay Hypothesis would dampen investment and slow the economy. They claim that individuals who have the means to invest may be dissuaded from doing so by high taxes on the rich, which in turn would reduce investment and the creation of new jobs. They further claim that high taxes discourage effort because people with large salaries are less likely to be motivated to work if their earnings are taxed at a higher rate (Slemrod, 1996).

However, others who support the Ability-to-Pay Theory maintain that it must be implemented to provide social justice. They say that a progressive tax system is required to guarantee that individuals with higher earnings pay more to the common good. Moreover, they believe that the idea may aid in the fight against wealth disparity. Ability-to-Pay Theory is important to the study because it offers a theoretical framework for comprehending the concept of fairness in taxes. According to this theory, wealthier earners have more of an obligation to share in the financial burden of maintaining society as a whole and hence should give a larger share of their income to government coffers. So, it is important to consider manufacturing companies' financial resources when crafting tax incentives.

Additionally, the Ability-to-Pay Theory argues in favour of a progressive tax system, where the tax rate rises with increasing income. Manufacturing enterprises that get the greatest rewards from tax incentives should ideally be required to contribute a larger share of their profits to the government. Fair and reasonable taxation is important for a thriving economy, and this may assist assure that.

2.2.3 Agency Theory

The agency theory was first proposed by Ross (1973), who presented the "principal's problem" as the central issue in the relationship between the principal and the agent in a firm. The relationship between a company's principle (the owner) and the agent (the management) is the subject of agency theory (Jensen & Meckling, 1976; Ross, 1973). It's founded on the

principle of "division of labour," whereby one party (the "principal") gives another party (the "agent") the right to do certain actions on their behalf (Fama & Jensen, 1983). The idea focuses on the inherent tensions between an organization's owner and management, as well as the means through which these tensions might be mitigated for the sake of the business. In a principle-agent relationship, the agent often knows more than the principal about the company's inner workings and financial standing (Shleifer & Vishny, 1997). The agent has an incentive to prioritize their own interests above those of the principal because of the informational advantage they have. So, the principle has to think of a way to make the agent's goals coincide with their own.

Incentives like performance compensation, stock options, and bonuses are often utilized as a means of bringing parties together (Jensen & Meckling, 1976). These rewards give the agent a personal investment in the company's success and motivate them to work in the principal's best interests. These systems are not without their flaws, and they may encourage things like reckless behaviour, a focus on the short term, and the manipulation of financial outcomes. The use of audits, financial reports, and board supervision are all examples of monitoring and control techniques that may help align interests (Shleifer & Vishny, 1997). These safeguards provide the principle with knowledge that the agent is representing their best interests. These safeguards may be expensive and might not even work in certain cases.

Executive remuneration, corporate governance, mergers and acquisitions, and corporate social responsibility are just few of the many topics in finance, economics, and management that have been the subject of significant analysis using agency theory (Fama & Jensen, 1983; Shleifer & Vishny, 1997). In addition, it has been used to the study of how shareholders, creditors, and workers interact with a company. The application of agency theory to this study of the impact of tax incentives on the financial performance of manufacturing enterprises in Kenya might help researchers better grasp the managers' incentives and motivations in this area. Management and shareholder conflicts may be revealed, and recommendations for resolving them can be made. The idea proposes, for instance, that shareholders might devise incentive systems that motivate managers to behave in ways that benefit the shareholders as a whole, such increasing the company's profitability. Furthermore, the notion implies that shareholders may keep an eye on management to make sure they're doing what's best for the company.

In general, agency theory is a helpful paradigm for examining the principal-agent dynamic in settings as diverse as corporate governance, public policy, and regulatory frameworks. When principals have a firm grasp of their agents' incentives and motives, they are better able to build conflict-reducing procedures that boost productivity.

2.3 Conceptual Framework

Cooper and Schindler (2011) postulate that research revolves around independent and dependent variables, with the researcher attempting to establish the relationship between the two. According to Mugenda (2008); Smith (2004), a conceptual framework is viewed as a hypothesized model which tries to link the dependent and independent variables under study. In this sense, an independent variable is viewed as a factor that affects the dependent variable, an outcome in the study.

The purpose of this study is to examine the effect of tax incentives on the financial performance of manufacturing firms in Kenya. Figure 2.1 therefore depicts a diagrammatical relationship between tax incentives and financial performance of manufacturing firms. Capital allowances, allowable deductions and investment deductions are independent variables that may point to the level of organizational performance, the dependent variable also viewed as the outcome.

Figure 2.1: Conceptual Framework

2.4 Empirical Review

This section presents a review of previous empirical studies that have examined the relationship between tax incentives and financial performance of firms. Specifically, this review focuses on studies that have investigated the effects of capital allowance, allowable deductions, and investment deductions on financial performance.

2.4.1 Capital Allowance

Agundu and Ohaka (2013) investigated the effectiveness of capital allowance as an investment incentive for stakeholders in the Nigerian manufacturing sector. The study analyzed the influence of capital allowance on corporate financial performance, including profit after tax (PAT), return on total assets (ROA), and return on shareholders' equity (ROE), using financial data from 58 manufacturing firms listed on the Nigerian Stock Exchange (NSE). The statistical analysis, including coefficients of correlation and determination, revealed a significant positive relationship between capital allowance and PAT, ROA, and ROE. The study recommended that accounting and finance professionals in Nigerian manufacturing firms should properly document and report their investments in eligible industrial assets to maximize the benefits of capital allowance. However, investors should also exercise caution in acquiring and expanding industrial assets.

The study by Agundu and Ohaka (2013) provided valuable insights into the effectiveness of capital allowance as an investment incentive in the Nigerian manufacturing sector. The findings of the study revealed a positive relationship between capital allowance and financial performance metrics, including PAT, ROA, and ROE. As such, the study underscored the importance of accounting and finance executives in Nigerian manufacturing firms properly recording and profiling their investments in qualifying

industrial assets in accordance with tax regulations to take advantage of capital allowance grants. Despite the financial benefits of capital allowance, manufacturing sector investors should be cautious and avoid indiscriminate industrial asset acquisition and expansion.

2.4.2 Allowable Deductions

Alhulail (2014) researched the impact of tax incentives on sales of eco-friendly vehicles in Japan, using a sample of 10 eco-friendly vehicles from April 2006 to March 2013. Regression analysis was used to analyze the secondary data, and the results showed a significant positive effect of tax incentives on sales of eco-friendly vehicles.

Uwaume and Ordu (2014) studied the impact of tax incentives on economic development in Nigeria from 2004 to 2014, using a sample of 51 individuals from management, taxpayers, and staff of selected manufacturing firms in the South-South region of Nigeria. The research found that adequate tax incentives promote industrial growth and economic development. The authors recommended that the government should provide tax waivers to corporate entities to encourage growth, especially in their early stages, as the long-term benefits would surpass the initial revenue losses.

Onyango (2015) aimed to determine the impact of tax incentives on the financial performance of five-star hotels in Nairobi County, Kenya. A quantitative descriptive design was utilized with a census of all seven five-star hotels in the county. The study found a negative relationship between investment deductions and industrial building deductions with the financial performance of the five-star hotels. However, wear and tear allowances had a positive effect on their financial performance.

Ondabu, Muturi, and Sifunjo (2016) assessed the relationship between tax incentives and stock market performance of 61 listed firms in the NSE. A sample of 150 participants was selected through stratified random sampling from 30 firms listed in the NSE. The results showed that tax incentives have an insignificant effect on NSE performance. The study recommended establishing predictable, clear tax laws and a transparent tax administration system to provide favourable market opportunities for investors instead of granting investment incentives.

Ngure (2018) evaluated the impact of tax incentives on the performance of selected manufacturing firms in Kenya, using a descriptive design to examine the effects of corporate income tax incentives, capital allowance incentives, custom duty incentives, and excise tax incentives. The study concluded that the government should expand certain tax incentives, such as capital allowances, excise tax incentives, and custom duty incentives, to have a greater impact on firms. The study also emphasized the importance of having greater diversity and sustainability in the incentives offered, suggesting that tax incentives are necessary for the survival of a large number of firms.

2.4.3 Investment Deductions

UNCTAD (2011) conducted a comparative analysis of foreign direct investment (FDI) inflows in Kenya, Uganda, and Tanzania, which revealed that Uganda attracted more FDI despite offering fewer incentives than Kenya. The study found that tax incentives are not always effective and can lead to fiscal competition between neighbouring countries. Additionally, no cost-benefit study was conducted to determine the net benefit of tax incentives. The government ought to focus on developing effective fiscal policies that have benefits greater than their costs. Musyoka (2012) conducted a study on the impact of tax incentives on foreign direct investment. The study analyzed investment incentives, trade-related incentives, import duty exemptions, and FDI inflows over a 10-year period. The results of the correspondence and regression analysis, which included the calculation of mean, mode, and median, showed that tax incentives resulted in a loss of government income.

Musyoka (2012) studied the relationship between tax incentives and FDI. He used data on investment incentives, trade-related incentives, import duty exemption, and FDI inflows for a ten-year period. The researcher calculated mean, mode, and median to measure dispersion, and used correlation and regression analysis to determine the relationship between the dependent and independent variables. The results showed that tax incentives led to revenue losses for the government, contrary to the popular belief that tax incentives are effective in attracting FDI.

The findings of the study by Githaiga (2013) suggested that tax incentives do have an impact on the foreign direct investment (FDI) inflows of firms listed at the Nairobi Securities Exchange (NSE). Specifically, the study found that wear and tear had a strong relationship with FDI. These results suggested that tax incentives was to be an effective tool in attracting foreign investment and promoting economic growth. However, it is important to note that the study had a small sample size and only focused on firms listed at the NSE, so the results may not be generalizable to the wider economy. Further research with a larger sample size and a broader scope would be needed to provide a more comprehensive understanding of the impact of tax incentives on FDI in Kenya.

2.4.4 Financial Performance

Measuring a firm's financial performance involves assessing how effectively its assets are used to generate revenue from key operations. Morisset and Neda (2001) identified three dimensions of financial performance: profitability, growth, and market worth. Traditionally, financial performance has been measured by looking at revenues or profits, or by using financial ratios. However, Jaworski and Kohli (1996) proposed a more comprehensive approach to measuring firm performance, which included revenue and cost-based financial performance, customer-

related performance, innovation-related performance, and employee-related performance. Therefore, it is important to carefully scrutinize the different aspects of firm performance to determine its true performance in a given business year.

2.5 Critiques of the Study

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.

Klemm (2010) defined tax incentives as measures for improving the tax treatment in comparison with the general industry of certain activities or industries. 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, developed 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. Klemm (2010) 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.

Mayende (2013) did a study on the effects of tax incentives on firm performance: evidence from Uganda. The 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 indicated that tax incentives had positive impact on firm performance in terms of gross sales and value added. The study also established that firm age and firm size had a positive impact on firm performance. Large and medium firms performed better than small firms. Large firms were able to maximize the economies

of scale and increase their output. In addition, the study findings showed that the level of education of manager was significant in determining firm performance. Other firm characteristics such as ownership by domestic firm, foreign and joint venture did not affect firm performance. The study finding showed that ownership experience in a foreign firm did not affect firm performance.

Twesige and 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.

According to the PSC (2012), the economic variables of tax stimulus are 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 ought to shift away from offering tax incentives to encourage domestic savings in the formal sector to increase employment (Klemm et al, 2010).

The literature review showed that a number of studies had been conducted to show the relationship between various tax incentives and financial performance for instance; Akinyomi and Chukwumerije (2011) examined the effect of tax incentives on investment in Nigeria while Gatsi et al., (2013) investigated the influence of tax incentives on small and medium-sized enterprises in Ghana. Onyango (2015) studied the impact of tax incentives on the financial performance of the manufacturing sector in Kenya, and Agundu and Ohaka (2013) explored the effect of tax incentives on foreign direct investment in Nigeria. The review showed that much concentration had been on corporate tax incentives and capital allowance incentives with less focus on allowable deductions and investment allowance even though they had been found to influence the performance of corporates. The review showed that the direct link of tax incentives to performance of firms had not been extensively researched. The review also showed that few studies exist, especially outside Nairobi on the link between tax incentives and financial performance of firms especially in the manufacturing sector. Most studies had rather

been undertaken in other countries including Uganda, Nigeria and Ghana.

2.6 Summary

This chapter presents the introduction of the project and a summary of tax incentives, discusses their function in fostering economic growth, and explains the theory framework (Which nets down the Deterrence theory, Ability to pay theory and agency theory) behind their efficacy. The conceptual framework is also presented. Next, an overview of empirical studies on the connection between tax incentives and organizational performance is presented, with an emphasis on research from developing economies like Kenya and other countries.

The evaluated research indicated conflicting findings, with some showing a favourable effect of tax incentives on firm performance and others showing no meaningful effect. Towards the end of the chapter, the absence of empirical data connecting tax incentives and the financial performance of manufacturing enterprises in Nairobi, Kenya was highlighted as a research gap. The present study was motivated by the knowledge gap; its aim was to fill the gap and add to the body of previous research. This

chapter provided a theoretical and empirical basis on the effect of tax incentives on financial performance, laying the groundwork for the present investigation.

2.7 Research Gaps

Enhanced taxation is a gain for every government, for it means that essential services can easily be offered to the citizenry. In order to improve tax revenue collection, many governments apply every strategy so as to meet this obligation. One of such strategies is offering tax incentives to attract FDIs which have the capacity to impact the economy in a meaningful way. Yet, tax incentives have both advantages and disadvantages, not forgetting the challenges encountered by the government when offering them to any given firm at any given time. For instance, a study done by the World Bank Investment Advisory Services in 2009 established that in many sub-Saharan countries tax incentives did not effectively correct unattractive investment environment. The study indicated that poor infrastructural facilities, macroeconomic uncertainties, political stability, and poor markets among other factors also played a significant role in determining performances of companies regardless of whether they were given tax incentives or not. From the past, there have been limited research done on the effects of tax incentives based on the sectoral performance of the economy. It is in light of the above fact and controversy still surrounding tax incentives and financial performance of companies which received the incentives that this study sought to examine the relationship between tax incentives and organizational performance for the manufacturing sector.

3. Research Methodology

3.1 Introduction

This chapter highlights the methodology used in the study and gives justification for the same. The chapter focuses on the research design, target population, sampling and sample size, and data collection instruments. Besides, data collection procedures, pilot testing, and data analysis techniques, as well as research ethical considerations are presented.

3.2 Research Design

Research design entails a plan that lay the steps to be followed in carrying out the inquiry (Tobi & Kampen, 2018). It sought to provide the answers to the research problems of the study. The design shapes the means to use to gather and process the views and information in an inquiry. This study leveraged on a descriptive research design that used stratified sampling technique. The choice of the design was motivated by the fact that the manufacturing companies operated on different specialization. The strata were determined by factors such as the product of specialization, and the extent to which they complied with applicable tax laws.

3.3 Sampling Frame

According to the Kenya Association of Manufacturers directory as at 2022, there were 1072 manufacturing companies in industrial area, Nairobi, Kenya. The study randomly selected 214 firms across various industries as representatives of the manufacturing firms in this study, from where a sample was obtained as shown in the following subsection.

3.4 Target Population

Kothari (2014) defines a population as the total group of elements from which a researcher intends to make certain deductions or inferences. A population could be a well-defined set of people, objects, services, or events. Target population consisted of all members from which a researcher picked a sample. Important to note is the fact that all the subjects in a target population must have some common observable characteristics of a particular nature distinct from other populations. This made it possible to generalize data at the end of the study. The target population for this study was the manufacturing companies in Nairobi specifically in Industrial Area since its harboured by many manufacturing companies, as shown in Table 3.1.

Table 3.1: Target Population

Over the past decade, there has seen significant economic happenings in Kenya, which have had an impact on the manufacturing sector in Nairobi's Industrial Area. For instance, in 2013, Kenya became the first East African country to join the league of oil-exporting nations after discovering oil reserves in Turkana County. In 2013 and 2017, Kenya held general elections, which led to a prolonged period of political uncertainty, causing a slowdown in economic activities. In 2020, the world was hit by the COVID-19 pandemic, which affected the global economy, including Kenya's. The

government implemented various measures such as lockdowns, curfews, and movement restrictions to curb the spread of the virus. These measures had a significant impact on the manufacturing sector, with some companies having to close down temporarily due to reduced demand for their products. Therefore, by selecting a target population of manufacturing companies in Nairobi's Industrial area, the study can capture the impact of these economic happenings on the manufacturing sector and make valid deductions and inferences.

3.5 Sample and Sampling Technique

In describing a sample, Kothari (2014) stated that it is a subset of the population selected to represent it, and it must be obtained using a suitable sampling method in line with the study design. For sample size determination, there are several formulas that can be used to calculate the sample size. This study used the Yamane formula, which was used to calculate the sample size required for a certain level of confidence interval, given a population of a specific size. The formula is:

$$n = N / (1 + (N * e^2 / N-1)),$$

where:

- n = sample size
- N = population size (214)
- e = margin of error (determined by the desired confidence interval and the sample size)

Using the same approach as before, but with a 92.5% confidence level, we get:

$$e = 1.96 * \text{sqrt}((0.5 * 0.5) / n) = 0.0868 \text{ (rounded to four decimal places)}$$

$$n = 214 / (1 + (214 * 0.0868 * 0.0868 / 213)) = 50.41$$

Therefore, the study sampled 50 manufacturing firms in industrial area, Nairobi. Based on strata of the study, Table 3.2 shows how sample size determination was conducted;

Table 3.2: Sample Size Determination

Sampling allows the researcher to estimate unknown population characteristics and make accurate generalizations. The study used two sampling techniques: stratified and simple random sampling. Simple random sampling was preferred because it eliminated bias and gave every element in the population an equal chance of being selected. The companies were grouped into non-overlapping strata based on their sectors, and simple random sampling was used to select representatives from specific sectors. To ensure credible results, the study sampled 50 manufacturing firms, exceeding the recommended minimum of 30 units of analysis for social science research according to Creswell (2013).

3.6 Data Collection Sources

The study used secondary data to answer its research questions. Secondary data was obtained from the individual manufacturing companies listed by Kenya Association of Manufacturers (KAM) and other relevant journals. Secondary data was appropriate because of its ability to gather large sample sized data hence saving time (Kothari, 2014).

Furthermore, secondary data was cost-effective and allowed the researcher to obtain data from a wide range of sources. The study used financial reports of the selected manufacturing companies for the period under review (2011-2020). The financial reports provided information on the tax incentives received by the companies, their financial performance, capital investments, allowable deductions, and investment deductions.

3.7 Data Collection Source

The study adopted a secondary data collection method to obtain data from the targeted manufacturing firms. The data was collected through a review of published reports and websites of the companies. In cases where there was a lack of data in the published reports, the researcher approached the companies to obtain the data. The KAM directory was also used as a source of data for the study. The use of secondary data collection method was appropriate for this study because it was less costly and less time-consuming. Additionally, secondary data enabled the study to capture a larger sample size and to analyze a wide range of variables. The collected data was subjected to quality control measures to ensure reliability and validity.

3.8 Data Analysis and Presentation

Data analysis involved editing, coding, classification, tabulation, and graphical presentation (Hall & Lerner, 2010). It usually involved reducing accumulated data to a manageable size, developing summaries, looking for patterns, and applying statistical techniques (Cooper & Schindler, 2011). Information prior to this research was edited to make it unambiguous and clear in order to maintain consistency and accuracy. This research used quantitative techniques in analyzing the data. This included descriptive statistics (means and standard deviations), and correlation and simple regression analysis for determining relationships that existed between and amongst the study variables. This data was presented in tables and charts.

4. Research Findings and Discussion

4.0 Introduction

This chapter presents the data analysis, the results, and the interpretation of the findings of the study on the effect of tax incentives on the financial performance of manufacturing firms in Industrial Area, Kenya for a period covering 2011-2020. In the first part of the chapter, the presentation focuses on the descriptive analysis of the financial data obtained from the audited records of manufacturing companies. The second part presents the results on the effect of capital allowance, allowable deductions, and investment deductions on the financial performance of manufacturing companies in Kenya. The chapter also provides a discussion of the findings vis-à-vis other similar research findings.

4.1 Diagnostic Tests

The study conducted four tests to assess the validity of regression analysis assumptions, including normality,

multicollinearity, linearity, and homoscedasticity. The normality of data was checked using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Multicollinearity was assessed using Variance Inflation Factors (VIF). Homoscedasticity was evaluated using the Levene statistic for the test of homogeneity of variance. Linearity was tested using the significant deviation from linearity values.

4.1.1 Normality Tests

The Kolmogorov-Smirnov test and Shapiro-Wilk test are commonly used tests to assess normality. The Kolmogorov-Smirnov test is a non-parametric test that compares the observed data distribution with the expected normal distribution, while the Shapiro-Wilk test is a parametric test that tests for normality based on the mean and variance of the data. A significant p-value greater than .05 suggests that there is no evidence to reject the null hypothesis of normality. The normality of the variable was therefore tested using both the Kolmogorov-Smirnov and Shapiro-Wilk tests, and the results indicated a significant value of $p > .05$, which suggests that the data distribution was normal. These findings were presented in Table 4.1.

Table 4.1: Normality Test for Technology-Based Support

4.1.2 Linearity Tests

A test for linearity was performed using significant deviation values from linearity for all variables. If the probability is over 0.05, it means that the data has a linear distribution. The results presented in Table 4.2 indicate a linear correlation between the study variables, as shown by the deviation from linearity value being greater than 0.05. This suggests that the assumption requiring a linear relationship between the independent and dependent variables was not violated and that regression analysis can be applied to these variables. For capital allowance, the results show that the data did not violate the assumption of linearity ($F=1.557$, $p=.163$). For allowable deductions, the data did violate the assumption of linearity ($F=1.036$, $p=.426$) and investment deductions, the data did not violate the assumption of linearity ($F=.612$, $p=.807$).

Table 4.2: Linearity Tests

Table 4.3 presents the results of the homoscedasticity test, which was conducted using the Levene Statistic to evaluate pairs of variables. The test was performed on three variables: Capital Allowance, Allowable Deductions, and Investment Deductions. The Levene Statistic and associated p-values are also provided. From the findings, it can be observed that the p-values for all three variables are greater than .05, indicating that the variance is homogeneous. Therefore, the assumptions for regression analysis have been met and the technique can be applied to the study.

Table 4.3: Homoscedasticity Test Results

4.1.4 Multicollinearity Test

Multicollinearity in the study was checked using the Variance Inflation Factors (VIF). From the findings shown in

Table 4.4, all three variables have a tolerance value greater than 0.1 and a VIF value less than 10, indicating that multicollinearity is not a problem in this study. The findings are shown in Table 4.4.

Table 4.4: Multicollinearity Test

4.2 Descriptive Analysis

The study focused on capital allowance, allowable deductions, investment deductions and financial performance for the ten years beginning 2011 and ending 2020. The values of the financial data were obtained from 50 manufacturing companies and are as presented in this section.

4.2.1 Effect of Capital Allowance on Financial Performance

To get a deeper understanding of the industry, the researcher conducted a descriptive analysis of the financial data. The descriptive findings on capital allowance for the manufacturing companies indicate that the mean capital allowance increased over the years from Kshs 3.499 billion in 2011 to Kshs 5.63 billion in 2020. The maximum standard deviation also increased over the years, indicating a wide variation in the capital allowance among the manufacturing companies.

The increase in the mean capital allowance over the years could be attributed to the government's tax policies aimed at promoting investment and growth in the manufacturing sector. The government has introduced various tax incentives, including accelerated capital allowances, to encourage investment in machinery and equipment by manufacturing companies. Additionally, the increase in the maximum capital allowance over the years could be attributed to the growth and expansion of manufacturing companies, resulting in higher capital investments in machinery and equipment. The wide variation in the capital allowance among the manufacturing companies could be due to differences in the size, nature, and level of capital investments among the manufacturing companies. The findings of the study on capital allowances are shown in Table 4.5.

Table 4.5: Descriptive Findings on Capital Allowance for the Manufacturing Companies

4.2.2 Effect of Allowable Deductions on Financial Performance

Table 4.6 shows the descriptive findings on allowable deductions for manufacturing companies in Kenya from 2011 to 2020. The table reveals that the mean allowable deductions increased from Kshs 19.61 billion in 2011 to Kshs 60.5 billion in 2020. The minimum allowable deduction in 2011 was Kshs 145.89 million, while the maximum allowable deduction in 2020 was Kshs 160.98 billion. The standard deviation of allowable deductions however reduced from Kshs 51.09 billion in 2011 to Kshs 22.757 billion in 2020.

The increase in the mean allowable deductions over the years could be attributed to the fact that manufacturing companies have been investing more in capital-intensive

projects and acquiring capital assets, which they can claim deductions for. The increase in the maximum allowable deduction from 2011 to 2020 indicates that some manufacturing companies have been taking advantage of the tax laws to reduce their tax liability. The standard deviation of allowable deductions increased over the years, which indicates that there is a wider variation in the number of allowable deductions claimed by different manufacturing companies.

Table 4.6: Descriptive Findings on Allowable Deductions for the Manufacturing Companies

4.2.3 Effect of Investment Deductions on Financial Performance

Table 4.7 shows the investment deductions for manufacturing companies in Kenya from 2011 to 2020. The findings indicate that the minimum investment deduction amount overall increased from Kshs 90.3 million in 2011 to Kshs 290.6 million in 2020. The maximum investment deduction amount was highest in 2020 and lowest in 2012. The mean investment deduction amount was highest in 2020 at Kshs 16.254 billion and lowest in 2011 at Kshs 6.2 billion.

The increase in the investment deduction amount from 2011 to 2020 may be attributed to the growth in the manufacturing sector in Kenya. This growth may be attributed to the government's efforts to promote manufacturing through various initiatives, such as tax incentives and favorable policies. The increase in the investment deduction amount in 2020 may also be due to the economic effects of the COVID-19 pandemic, which may have prompted companies to invest more in their operations. The increase in the standard deviation from 2011 to 2020 may be due to the varying investment deduction amounts across companies and the economic environment.

Table 4.7: Findings on Investment Deductions for the Manufacturing Companies

4.2.4 Financial Performance

Financial performance was measured using Return on Investment (ROI). The results indicate that the mean ROI for the manufacturing companies increased from 0.3422 in 2011 to 0.3874 in 2020. The standard deviation increased gradually from 0.31866 in 2011 to 0.35297 in 2020. The minimum ROI was negative for all the years, ranging from -0.16 in 2011 to -0.12 in 2020. The maximum ROI increased from 0.83 in 2011 to 1.20 in 2020.

The increase in mean ROI from 2011 to 2020 indicates that the manufacturing companies were able to generate more profits from their investments during this period. This could be due to factors such as increased demand for manufactured goods, improved efficiency in production processes, and effective management of resources. However, the increase in standard deviation also shows that there was more variability in ROI across companies during this period. This could be due

to differences in investment strategies, industry-specific factors, and market conditions.

The negative minimum ROI in all the years indicates that some manufacturing companies experienced losses on their investments. This could be due to various factors such as poor investment decisions, unexpected changes in market conditions, or ineffective management of resources. The increase in maximum ROI from 2011 to 2020 suggests that some companies were able to generate exceptionally high returns on their investments, possibly due to successful expansion strategies, effective marketing campaigns, or innovative product development. The findings are shown in Table 4.8.

Table 4.8: Descriptive Results on ROI for the Manufacturing Companies

The ROI mean trends were also presented as shown in Figure 4.1.

Figure 4.1: Mean ROI Trends of the Manufacturing Companies

4.3 Correlation Analysis

Table 4.9 shows the correlation analysis for the relationship between tax incentives and financial performance for the manufacturing companies. The table displays the Pearson correlation coefficient values and significance levels for each pair of variables. The results indicate that there is a significant positive correlation between investment deductions and financial performance ($r = .592$, $p < .01$). This suggests that as investment deductions increase, the financial performance of the manufacturing companies also improves.

Similarly, there is a significant positive correlation between capital allowances and financial performance ($r = .463$, $p < .01$) as well as between allowable deductions and financial performance ($r = .415$, $p < .01$). These results suggest that these tax incentives also have a positive relationship with financial performance, although the strength of the relationship is not as strong as that between investment deductions and financial performance. Overall, the results of the correlation analysis support the theory that there is a relationship between tax incentives and financial performance for the manufacturing companies in Kenya.

Table 4.9: Correlation Analysis between Tax Incentives and Financial Performance

The findings of this study indicate that investment deductions have the strongest positive relationship with financial performance, which suggests that this type of tax incentive may be particularly effective in promoting business growth. These studies however suggest that the impact of tax incentives on business performance may be context-specific and depend on factors such as the size and sector of the business, as well as the wider economic environment. The findings of this study highlight the need for policymakers to carefully design and evaluate tax incentive programs to ensure

that they are effective in promoting business growth and contributing to broader economic development goals.

4.4 Regression Analysis

This section presents the R² value for regression model summary, F statistics for regression ANOVA and p values as well as t-test statistics for regression coefficients for the linear relationship between the independent variables and financial performance in manufacturing firms in Kenya.

4.4.1 Capital Allowance

To find out how capital allowance affect financial performance of manufacturing companies in industrial area, Nairobi Kenya. Table 4.20 displays the results of the regression analysis conducted to investigate the relationship between capital allowance and financial performance in Kenyan manufacturing companies.

Table 4.10: Model Summary of Capital Allowance

From Table 4.10, the R-value is 0.463, indicating a moderate positive correlation between capital allowance and financial performance. The R-squared value of 0.215 implies that 21.5% of the variation in financial performance can be explained by the variation in capital allowance. The adjusted R-squared value is 0.198, indicating that the addition of the predictor variable does not significantly improve the model's ability to predict financial performance. The standard error of the estimate is 0.85839, which means that the predicted values are typically within 0.85839 units of the actual value of financial performance.

Table 4.11: ANOVA of Capital Allowance

Table 4.11 presents the ANOVA results for the effect of capital allowance on financial performance. The regression model has a significant F-value of 13.108 ($p < .001$), indicating that the model is a good fit for the data. These results suggest that capital allowance is a significant predictor of financial performance of manufacturing companies in Kenya.

Table 4.12: Coefficients of Capital Allowance

Based on Table 4.12, it can be observed that the regression weight for capital allowance was positive and significant ($\beta = 0.463$, $t = 3.620$, $p < .001$). This suggests that the null hypothesis was rejected at $P < 0.05$ level of significance, indicating that capital allowance has a significant relationship with financial performance. The regression estimate for capital allowance was 0.738, which means that a unit increase in capital allowance would result in a 73.8% increase in financial performance.

4.4.2 Allowable Deductions

To establish the effect of allowable deductions on financial performance of manufacturing companies in industrial area, Nairobi Kenya.

Table 4.13: Model Summary of Allowable Deductions

Table 4.13 shows the model summary for the effect of allowable deductions on financial performance of manufacturing companies in Kenya. The coefficient of

determination (R-squared) value is 0.172, indicating that allowable deductions explain 17.2% of the variance in financial performance. The standard error of the estimate is 0.88119, indicating that the predicted values have an average error of 0.88119 units.

Table 4.14: ANOVA of Allowable Deductions

Table 4.14 shows that the regression model for allowable deductions was significant ($F=9.987$, $p=.003$), indicating that allowable deductions had a significant effect on financial performance.

Table 4.15: Coefficients of Allowable Deductions

Table 4.15 shows that the regression weight for allowable deductions was positive and significant ($\beta= 0.586$, $t= 3.160$, $p < .05$). Thus, the null hypothesis was rejected at $P < 0.05$ level of significance, suggesting that there is a significant relationship between allowable deductions and financial performance. The regression estimate for allowable deductions was 0.586, indicating that a unit increase in allowable deductions would result in a 58.6% increase in financial performance.

4.4.3 Investment Deductions

To investigate effect of investment deductions on financial performance of manufacturing companies in industrial area, Nairobi Kenya.

Table 4.16: Model Summary of Investment Deductions

Table 4.16 indicates that the model summary for investment deductions shows a moderate positive relationship with financial performance of manufacturing companies in Kenya. The R-square value is 0.351, indicating that investment deductions explain 35.1% of the variation in financial performance. The adjusted R-square value is 0.337, suggesting that the model is a good fit. The standard error of the estimate is 0.78051, indicating that the difference between the actual and predicted values of financial performance is 0.78051. The model's R value is 0.592, indicating a positive correlation between investment deductions and financial performance.

Table 4.17: ANOVA of Investment Deductions

Table 4.17 indicates that there is a significant relationship between investment deductions and financial performance of manufacturing companies in Kenya ($F=25.911$, $p<0.001$).

Table 4.18: Coefficients of Investment Deductions

Table 4.18 shows that the regression weight for investment deductions was positive and significant ($\beta= 0.661$, $t= 5.090$, $p < .001$). Therefore, the null hypothesis was rejected at $P < 0.001$ level of significance implying that investment deductions have a significant relationship with financial performance of manufacturing companies in Kenya. The regression estimate for investment deductions was 0.661; this indicates that a unit increase in investment deductions would result in a 66.1% increase in financial performance.

4.4.4 Multiple Regression Analysis

The study used multiple regression to explore the relationship between financial performance of manufacturing companies in industrial area, Nairobi Kenya and three independent variables; capital allowance, allowable deductions, and investment deductions.

Table 4.19: Model Summary for independent and dependent variables

Table 4.19 indicates that the multiple regression model using investment deductions, capital allowance, and allowable deductions as predictors has an R value of 0.608, which indicates a moderate positive correlation with the dependent variable (financial performance). The R-squared value of 0.370 means that the predictors in the model can explain 37.0% of the variance in financial performance. The adjusted R-squared value of 0.329 accounts for the number of predictors in the model. The standard error of the estimate is 0.78517, which indicates the average distance that the actual scores fall from the predicted scores.

Table 4.20: ANOVA for independent and dependent variables

The multiple regression analysis aimed to determine the combined effect of investment deductions, capital allowance, and allowable deductions on the financial performance of manufacturing companies in Kenya. The overall results showed that the model was statistically significant, with a significant F-value ($F=9.012$, $p<0.001$) indicating that the model was able to explain a significant proportion of the variance in financial performance.

Table 4.21: Coefficients of Overall Regression Model

Table 4.21 shows the regression coefficients for the multiple regression model, which includes the independent variables (Capital Allowance, Allowable Deductions, and Investment Deductions) and the dependent variable (Financial Performance). The constant term in the model is 0.411, which means that if all the independent variables are equal to zero, the Financial Performance variable is expected to be 0.411. The coefficient for capital allowance is 0.154, which is positive and significant at the 0.05 level ($t = 2.425$, $p = 0.031$). This suggests that a one-unit increase in capital allowance is associated with an estimated 0.154-unit increase in financial performance, holding all other independent variables constant.

The coefficient for allowable deductions is 0.400, which is positive and significant at the 0.05 level ($t = 2.181$, $p = 0.044$). This suggests that a one-unit increase in allowable deductions is associated with an estimated 0.4-unit increase in financial performance, holding all other independent variables constant. The coefficient for investment deductions is 0.834, which is positive and significant at the 0.01 level ($t = 3.341$, $p = 0.002$). This suggests that a one-unit increase in investment deductions is associated with an estimated 0.834-unit increase in financial performance, holding all other independent variables constant.

4.5 Discussion of key Findings

The key findings of the study are discussed in this section as per study objectives.

4.5.1 Capital Allowance and Financial Performance

The study found that capital allowance positively and significantly ($\beta = 0.463$, $t = 3.620$, $p < .001$) affected financial performance. The findings are consistent with other existing studies that have shown that tax incentives, including capital allowances, have a positive impact on investment and growth in the manufacturing sector, and therefore keep increasing for companies that are focused on improving their performance. For instance, a study by Piketty (2014) found that capital allowances have a positive impact on investment in the manufacturing sector in Kenya. Another study by Bonga-Bruce (2004) found that capital allowances are an effective tool for promoting investment and growth in the manufacturing sector in South Africa. The findings also highlight the importance of tax policies in promoting investment and growth in the manufacturing sector, which is crucial for economic development.

4.5.2 Allowable Deductions and Financial Performance

The study findings indicated that allowable deductions was positive and significant ($\beta = 0.586$, $t = 3.160$, $p < .05$) with financial performance. The findings of this study are consistent with the results of other studies that have examined the effect of allowable deductions on the financial performance of companies. For example, a study by Fakile and Uwuigbe (2013) found that tax incentives, such as allowable deductions, have been increasing over years and have a positive impact on the financial performance of companies. Another study by Institute of Economic Affairs (2012) found that allowable deductions have a significant impact on the financial performance of manufacturing companies, and companies have been increasing them over time. These findings suggest that allowable deductions play an important role in the financial performance of manufacturing companies.

4.5.3 Investment Deductions and Financial Performance

Investment deductions was positive and significant ($\beta = 0.661$, $t = 5.090$, $p < .001$) with financial performance of manufacturing companies in Kenya. The findings of the study are supported by existing literature. For example, a study by the Kenya Association of Manufacturers (KAM) showed that the sector's growth slowed down in 2017 due to political uncertainty and an unfavorable business environment. Another study by the World Bank (2020) highlighted the need for policy reforms to support the growth of the manufacturing sector in Kenya. These studies emphasize the importance of government policies and economic conditions in promoting

the growth of the manufacturing sector and attracting investments.

Overall, the findings of this study show a positive correlation between tax incentives and financial performance for manufacturing companies in Kenya. This is consistent with previous studies that have found a positive relationship between tax incentives and business performance (Kimeu, 2013; Mayende, 2013). These studies suggest that tax incentives provide an important financial resource for businesses, which can help to improve their profitability and investment decisions.

CHAPTER FIVE SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter provides a summary of the study, which aims to emphasize the main discoveries. It also offers conclusions based on these findings and provides recommendations on how to utilize these results for policy enhancements in Kenyan manufacturing firms. Finally, the chapter acknowledges the limitations of the study and offers suggestions for future research.

5.1 Summary of Findings

The study investigated the effect of tax incentives on the financial performance of manufacturing firms in Industrial Area, Kenya. The tax incentives considered in the study were capital allowance, allowable deductions, and investment deductions. The financial performance indicator used in the study was Return on Investment. The study therefore analyzed financial data from 50 manufacturing companies in Kenya over a period of 10 years (2011-2020). Descriptive analysis was conducted on capital allowance, allowable deductions, investment deductions, and financial performance.

5.1.1 Capital Allowance and Financial Performance

The study found that the mean capital allowance increased from Kshs 3.499 billion in 2011 to Kshs 5.63 billion in 2020, while the maximum capital allowance increased from Kshs 12.556 billion in 2011 to Kshs 16.189 billion in 2020. These findings can be attributed to the government's tax policies aimed at promoting investment and growth in the manufacturing sector, and the growth and expansion of manufacturing companies resulting in higher capital investments in machinery and equipment. The results of the study also showed that there is a significant positive relationship between capital allowance and financial performance. This indicates that companies that take advantage of capital allowance are able to reduce their tax liability and increase their profitability.

5.1.2 Allowable Deductions and Financial Performance

Regarding allowable deductions, the mean increased from Kshs 19.61 billion in 2011 to Kshs 60.5 billion in 2020, and the maximum increased from Kshs 145.89 million in 2011 to

Kshs 160.98 billion in 2020. These findings suggest that manufacturing companies have been investing more in capital-intensive projects and acquiring capital assets that they can claim deductions for. The wider variation in the number of allowable deductions claimed by different manufacturing companies could be attributed to the varying tax strategies adopted by these companies to minimize their tax liability. The study also found that there is a significant positive relationship between allowable deductions and financial performance. This indicates that companies that take advantage of allowable deductions are able to reduce their tax liability and increase their profitability.

5.1.3 Investment Deductions and Financial Performance

The study analyzed investment deductions for manufacturing companies in Kenya from 2011 to 2020. The minimum investment deduction amount increased from Kshs 90.3 million in 2011 to Kshs 290.6 million in 2020. The maximum investment deduction amount was highest in 2020 and lowest in 2012. The mean investment deduction amount was highest in 2020 at Kshs 16.254 billion and lowest in 2011 at Kshs 6.2 billion. The increase in the investment deduction amount from 2011 to 2020 may be attributed to the growth in the manufacturing sector in Kenya, as well as the government's efforts to promote manufacturing through various initiatives. The results of the study also showed that there is a significant positive relationship between investment deductions and financial performance. This indicates that companies that take advantage of investment deductions are able to reduce their tax liability and increase their profitability. The finding suggests that investment deductions are an effective tool for promoting investment and growth in the manufacturing sector in Kenya.

5.2 Conclusions

Based on the findings and discussions, the study makes the following conclusions per objective.

5.2.1 Capital Allowance and Financial Performance

Based on the findings of this study, it can be concluded that capital allowance has a positive effect on the financial performance of manufacturing firms in Kenya. The positive relationship between capital allowance and Return on Investment (ROI) indicates that manufacturing firms that receive capital allowance incentives from the government are likely to invest more in capital-intensive projects and acquire capital assets, leading to increased profitability. Therefore, the government's tax policies aimed at promoting investment and growth in the manufacturing sector through capital allowance incentives have been effective in enhancing the financial performance of manufacturing firms in Kenya.

5.2.2 Allowable Deductions and Financial Performance

The study concludes that allowable deductions have a significant positive effect on the financial performance of manufacturing firms in Kenya. Manufacturing firms that are able to take advantage of allowable deductions are likely to have lower taxable income, thereby reducing their tax liability and increasing their profitability. This finding suggests that the government's tax policies aimed at promoting investment and growth in the manufacturing sector through allowable deductions have been effective in enhancing the financial performance of manufacturing firms in Kenya.

5.2.3 Investment Deductions and Financial Performance

Furthermore, the study concludes that investment deductions have a positive effect on the financial performance of manufacturing firms in Kenya. The positive relationship between investment deductions and ROI indicates that manufacturing firms that receive investment deductions incentives from the government are likely to invest more in their businesses, leading to increased productivity and profitability. This finding suggests that the government's tax policies aimed at promoting investment and growth in the manufacturing sector through investment deductions have been effective in enhancing the financial performance of manufacturing firms in Kenya.

5.3 Recommendations

The study recommends that the government should continue to provide tax incentives such as capital allowance to manufacturing companies in order to encourage investment and growth in the sector. However, there is a need to review the current tax laws to make the capital allowance more flexible and attractive to potential investors. Additionally, the government should consider increasing the amount of capital allowance in order to further reduce the cost of capital for manufacturing companies, which would ultimately lead to increased investment and profitability.

The study recommends that manufacturing companies should take advantage of allowable deductions in order to reduce their tax liability and improve their financial performance. Companies should ensure that they are aware of all allowable deductions and take full advantage of them in their tax planning. In addition, the government should continue to provide a wide range of allowable deductions to encourage investment and growth in the manufacturing sector.

The study recommends that manufacturing companies should take advantage of investment deductions to reduce their tax liability and improve their financial performance. Companies should ensure that they are aware of all investment deductions and take full advantage of them in their tax planning. In addition, the government should continue to provide investment deductions to encourage investment and growth in the manufacturing sector. The government should also consider increasing the amount of investment deductions

in order to further reduce the cost of capital for manufacturing companies

Based on the significant positive effect of tax incentives on financial performance, the Kenyan government should continue to provide tax incentives to manufacturing firms in the form of capital allowances, allowable deductions, and investment deductions. This would encourage more investment in the manufacturing sector and promote economic growth.

Given the wide variation in the tax incentives and financial performance among the manufacturing companies, there is a need for the Kenyan government to tailor tax incentives to the specific needs of each manufacturing firm. This could be achieved through a more flexible and targeted tax incentive policy that takes into account the size, nature, and level of capital investment of each manufacturing company.

The study also highlights the importance of innovation and competition among manufacturing firms in enhancing their financial performance. Therefore, the Kenyan government should encourage innovation and competition in the manufacturing sector by providing support for research and development, technology transfer, and training programs. This would enable manufacturing firms to become more productive and efficient, thereby enhancing their financial performance.

The study also recommends that manufacturing firms should take advantage of the tax incentives provided by the Kenyan government to invest in capital-intensive projects and acquire capital assets. This would enable them to reduce their cost of capital, increase their investment, and improve their profitability. Additionally, manufacturing firms should adopt innovative and competitive strategies to improve their productivity and efficiency, which would further enhance their financial performance.

5.4 Suggestions for Further Research

Regarding tax incentives and financial performance in the manufacturing sector, this study recommends that future research investigates the effect of tax incentives on other financial performance indicators such as Return on Equity, Profit Margin, and Earnings Per Share. This will provide a comprehensive understanding of the impact of tax incentives on the financial performance of manufacturing firms in Kenya.

Furthermore, given the limited scope of this study, a similar study should be conducted with a larger sample size that includes manufacturing companies from other regions in Kenya. This will enable researchers to assess the generalizability of the findings across different regions and provide a broader understanding of the impact of tax incentives on the financial performance of manufacturing firms in Kenya.

Lastly, this study focused solely on the effect of tax incentives on the financial performance of manufacturing firms in Kenya. Future research could

investigate the effect of other external factors such as government policies, market conditions, and technological advancements on the financial performance of manufacturing firms in Kenya. This will provide a more comprehensive understanding of the factors that influence the financial performance of manufacturing firms in Kenya and enable policymakers to develop more effective policies to promote the growth and sustainability of the manufacturing sector

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Independent variables

Dependent variable

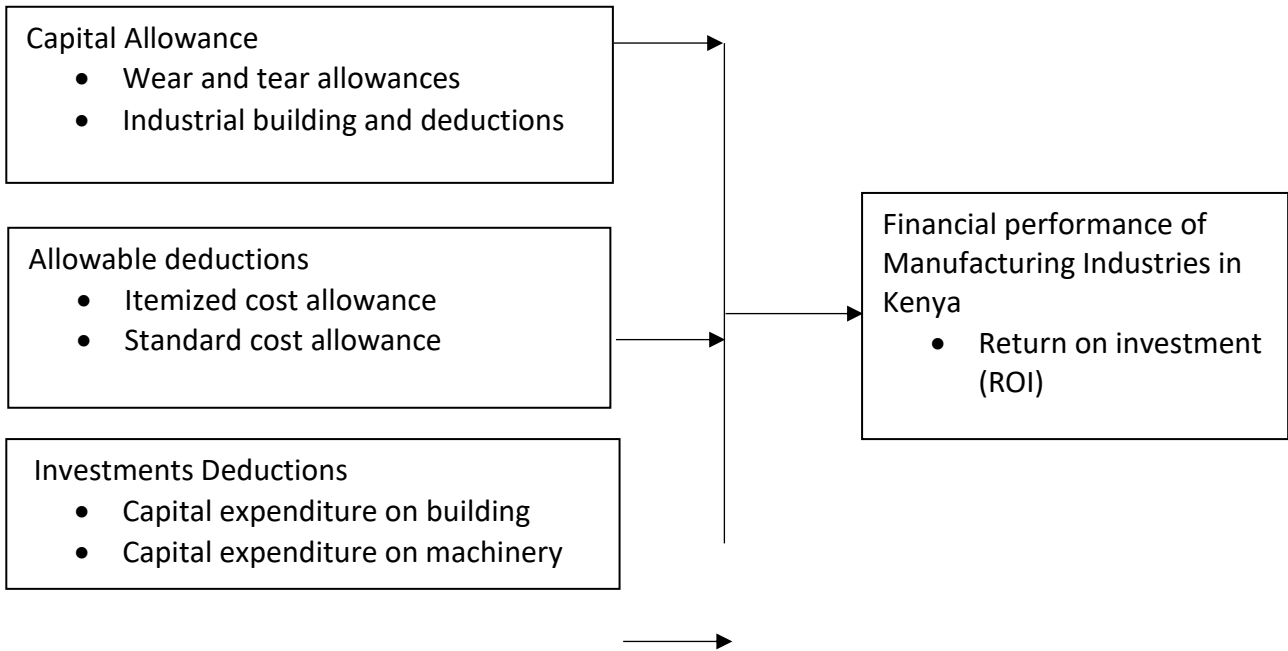


Figure 2.1: Conceptual Framework

Table 3.1: Target Population

Sector	Population Size
Food	35
Textile	44
Chemicals	28
Pharmaceuticals	29
Machinery	38
Electronics	40
Total	214

Table 3.2: Sample Size Determination

Sector	Population Size	Sample Size
Food	35	8
Textile	44	10
Chemicals	28	7
Pharmaceuticals	29	7
Machinery	38	9
Electronics	40	9
Total	214	50

Table 4.1: Normality Test for Technology-Based Support

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Capital Allowance	.230	50	.077	.831	50	.056
Allowable Deductions	.217	50	.192	.885	50	.091
Investment Deductions	.228	50	.101	.872	50	.291
Financial Performance	.108	50	.198	.957	50	.065

a. Lilliefors Significance Correction

Table 4.2: Linearity Tests

			Sum of Squares	df	Mean Square	F	Sig.
Financial Performance * Capital Allowance	Between	(Combined)	19.006	10	1.901	2.849	.009
	Groups	Linearity	9.658	1	9.658	14.476	.000
		Deviation from Linearity	9.348	9	1.039	1.557	.163
Within Groups			26.020	39	.667		
Total			45.026	49			
Financial Performance * Allowable Deductions	Between	(Combined)	14.151	9	1.572	2.037	.060
	Groups	Linearity	7.755	1	7.755	10.046	.003
		Deviation from Linearity	6.396	8	.800	1.036	.426

	Within Groups		30.876	40	.772		
	Total		45.026	49			
Financial Performance *	Between Groups	(Combined Linearity	20.286	12	1.690	2.528	.015
Investment Deductions		Deviation from Linearity	15.785	1	15.785	23.606	.000
			4.501	11	.409	.612	.807
	Within Groups		24.741	37	.669		
	Total		45.026	49			

Table 4.3: Homoscedasticity Test Results

	Levene Statistic	df1	df2	Sig.
Capital Allowance	1.826	10	35	.092
Allowable Deductions	.975	10	35	.482
Investment Deductions	1.888	10	35	.081

Table 4.4: Multicollinearity Test

	Tolerance	VIF
Capital Allowance	.264	3.795
Allowable Deductions	.238	4.197
Investment Deductions	.273	3.660

a. Dependent Variable: Financial Performance

Table 4.5: Descriptive Findings on Capital Allowance for the Manufacturing Companies

	N	Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
Capital Allowance 2011	50	72376.00	12556332.00	3499627.3806	2515483.12644
Capital Allowance 2012	50	84672.11	13001221.00	3749449.0096	2632089.87106

Capital Allowance 2013	50	88016.88	13378332.00	3973281.1856	2766946.50560
Capital Allowance 2014	50	98667.00	13789221.00	4198333.3420	2903397.84238
Capital Allowance 2015	50	98729.00	14189332.00	4428950.2496	3022877.99275
Capital Allowance 2016	50	99781.00	14567221.00	4654376.8008	3231297.35396
Capital Allowance 2017	50	102981.01	14978332.00	4915741.1062	3360206.39856
Capital Allowance 2018	50	104378.00	15389221.00	5127393.1114	3481734.01511
Capital Allowance 2019	50	99782.92	15778332.00	5341325.7568	3577711.25351
Capital Allowance 2020	50	107891.00	16189221.00	5630113.7368	3663135.39612

Table 4.6: Descriptive Findings on Allowable Deductions for the Manufacturing Companies

		Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
	N				
Allowable Deductions 2011	50	145892.00	330663959.00	19609613.06	51089351.93496
Allowable Deductions 2012	50	182179.00	368018785.00	21820607.54	56787539.76219
Allowable Deductions 2013	50	217926.00	390851579.00	23236243.10	59333662.99305
Allowable Deductions 2014	50	264083.00	390851579.00	26161012.20	62982557.38142
Allowable Deductions 2015	50	315124.00	390851579.00	28596869.20	65812512.61874
Allowable Deductions 2016	50	364761.00	114108996.00	12936643.54	21167196.74584
Allowable Deductions 2017	50	121393.00	139309082.00	53430440.28	19543910.88661
Allowable Deductions 2018	50	133789.00	146257118.00	51858761.76	20583892.92990
Allowable Deductions 2019	50	251092.00	150110265.00	60207671.50	21170613.20338
Allowable Deductions 2020	50	304219.00	160978267.00	60521403.96	22757132.49079

Table 4.7: Findings on Investment Deductions for the Manufacturing Companies

		Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
	N				
Investments Deductions 2011	50	90373.00	7601753.00	6275652.02	13203294.16

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Investments Deductions 2012	50	142723.00	7095096.00	5317484.72	10592570.19
Investments Deductions 2013	50	121393.00	8300988.00	5783260.50	12832121.36
Investments Deductions 2014	50	142523.00	9112663.00	7289077.80	15982309.31
Investments Deductions 2015	50	102513.00	9190214.00	6948220.90	14862454.18
Investments Deductions 2016	50	103005.00	10219900.00	9682280.32	44501485.11
Investments Deductions 2017	50	100148.00	10110265.00	9479393.84	10935645.23
Investments Deductions 2018	50	236007.00	13636232.00	9936840.18	8502720.55
Investments Deductions 2019	50	227644.00	18938377.00	10070946.52	8210819.11
Investments Deductions 2020	50	290644.00	20691020.00	16254476.88	15829547.99

Table 4.8: Descriptive Results on ROI for the Manufacturing Companies

	N	Minimum	Maximum	Mean	Std. Deviation
ROI 2011	50	-.16	.83	.3422	.31866
ROI 2012	50	-.26	.84	.3469	.31865
ROI 2013	50	-.33	.90	.3597	.33282
ROI 2014	50	-.30	.86	.3652	.33363
ROI 2015	50	-.28	.87	.3656	.33767
ROI 2016	50	-.26	.87	.3702	.34380
ROI 2017	50	-.21	.88	.3670	.33707
ROI 2018	50	-.19	.90	.3708	.33946
ROI 2019	50	-.15	1.00	.3718	.33670
ROI 2020	50	-.12	1.20	.3874	.35297

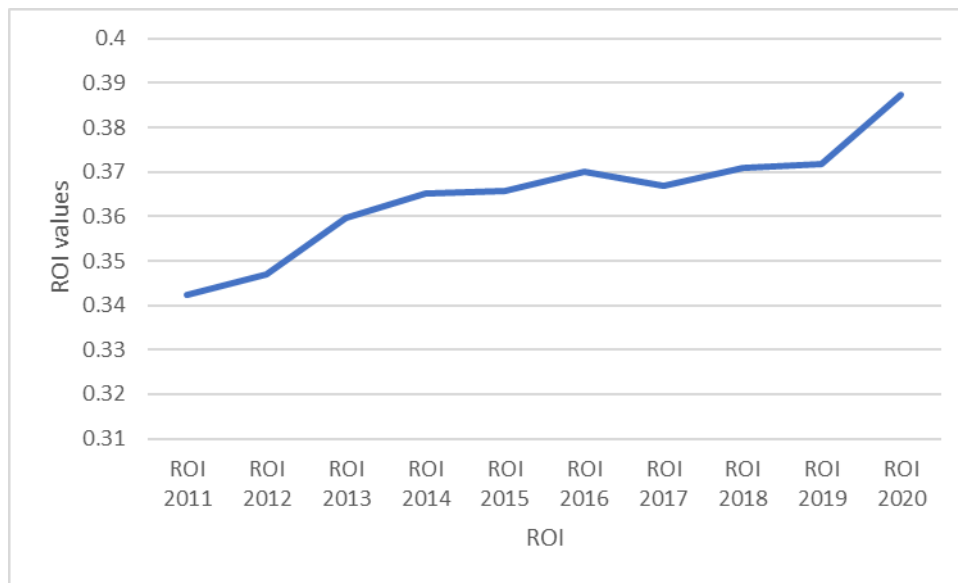


Figure 4.1: Mean ROI Trends of the Manufacturing Companies

Table 4.9: Correlation Analysis between Tax Incentives and Financial Performance

		Financial Performance	Capital Allowance	Allowable Deductions	Investment Deductions
Financial Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	50			
Capital Allowance	Pearson Correlation	.463**	1		
	Sig. (2-tailed)	.001			
	N	50	50		
Allowable Deductions	Pearson Correlation	.415**	.832**	1	
	Sig. (2-tailed)	.003	.000		
	N	50	50	50	

Investment	Pearson	.592**	.805**	.826**	1
Deductions	Correlation				
	Sig. (2-tailed)	.000	.000	.000	
	N	50	50	50	50

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

Table 4.10: Model Summary of Capital Allowance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463 ^a	.215	.198	.85839

a. Predictors: (Constant), Capital Allowance

Table 4.11: ANOVA of Capital Allowance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.658	1	9.658	13.108	.001 ^b
	Residual	35.368	48	.737		
	Total	45.026	49			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Capital Allowance

Table 4.12: Coefficients of Capital Allowance

Model		Unstandardized		Standardized		
		Coefficients		Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.331	.828		-.400	.691

Capital	.738	.204	.463	3.620	.001
Allowance					

a. Dependent Variable: Financial Performance

Table 4.13: Model Summary of Allowable Deductions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415 ^a	.172	.155	.88119

a. Predictors: (Constant), Allowable Deductions

Table 4.14: ANOVA of Allowable Deductions

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.755	1	7.755	9.987	.003 ^b
	Residual	37.272	48	.776		
	Total	45.026	49			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Allowable Deductions

Table 4.15: Coefficients of Allowable Deductions

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	.302	.749		.403	.689
	Allowable Deductions	.586	.185	.415	3.160	.003

a. Dependent Variable: Financial Performance

Table 4.16: Model Summary of Investment Deductions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.592 ^a	.351	.337	.78051

a. Predictors: (Constant), Investment Deductions

Table 4.17: ANOVA of Investment Deductions

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.785	1	15.785	25.911	.000 ^b
	Residual	29.242	48	.609		
	Total	45.026	49			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Investment Deductions

Table 4.18: Coefficients of Investment Deductions

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.105	.509		.207	.837
	Investment Deductions	.661	.130	.592	5.090	.000

a. Dependent Variable: Financial Performance

Table 4.19: Model Summary for independent and dependent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.608 ^a	.370	.329	.78517

a. Predictors: (Constant), Investment Deductions, Capital Allowance, Allowable Deductions

Table 4.20: ANOVA for independent and dependent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.668	3	5.556	9.012	.000 ^b
	Residual	28.359	46	.616		
	Total	45.026	49			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Investment Deductions, Capital Allowance, Allowable Deductions

Table 4.21: Coefficients of Overall Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.411	.794		.518	.607
	Capital Allowance	.154	.363	.097	2.425	.031
	Allowable Deductions	.400	.338	.283	2.181	.044
	Investment Deductions	.834	.250	.748	3.341	.002

a. Dependent Variable: Financial Performance