TAX INCENTIVES AND PERFORMANCE OF SELECTED MANUFACTURING FIRMS IN KENYA

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JULY, 2018
DECLARATION

I declare that this research project is my original work and that it has never been presented to
Kenyatta University or any other university for any degree or any other academic award.

Signed .................................  Date........................................

PATRICK MUTHARI NGURE

D53/OL/CTY/24066/2014

Declaration by the Supervisor

I confirm that the work in this research project was done by the Candidate under my supervision.

Signed .................................  Date........................................

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DEDICATION

I dedicate this research project to all those who value education as the greatest inheritance a child can get from a parent. I offer my special dedication to my grandmother, Cucu Wanjiru Muthari (Wamacharibu) who through love encouraged me to pursue education despite her scanty past in the education journey. The endless effort of my mother- Pauline Njeri to ensure I succeed is priceless. When I was almost giving up, my Aunt Cecilia Wairimu encouraged me to the end and am I really indebted for her endless tokens for upkeep and fee balances. I also dedicate this research project to my lovely wife- Maggie, son- Asher, daughter- Amie, siblings- Fridah and Martin and friends for their moral support and understanding throughout my university education, I love you so much. Above all I dedicate this work to my almighty God for His blessings.
ACKNOWLEDGEMENTS

I wish to thank the Almighty Lord for showering me with the blessing of good education and answering my prayers for a prosperous future. To my family, you have been a pillar of support. Kenyatta University through my Supervisor Dr. Lucy Wamugo, I’m really grateful of your guidance. Special thanks also go to all my friends for the peer review and moral support.
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OPERATIONAL DEFINITIONS OF TERMS

Capital allowances incentives: refer to sums of money a business can deduct from the overall corporate or income tax on its profits.

Corporate income tax incentives: refer to a reduced (statutory) corporate income tax rate on qualifying income to particular types of activity such as Manufacturing, locations or regions.

Custom duty incentives: refer to an exemption or a reduction of a tariff or tax on the importation or exportation of goods. Commercial goods not yet cleared through customs are held in a customs area, often called a bonded store, until processed.

Excise tax incentives: refers to exemption or a reduction of an inland tax on the sale, or production for sale, of specific goods or a tax on a good produced for sale, or sold, within a country or licenses for specific activities.

Manufacturing: refers processing of raw materials into finished goods through the use of tools and processes. Manufacturing is a value-add process.

Performance: refers to the actual output or results of an organization as measured against its intended outputs (goals/objectives). In this case it refers to a measure of profitability of the company.

Special Zones: refers to special areas that are geographically located to enjoy tax exemptions of varying scope mainly since they are targeted for exporters.

Tax Holidays: refers to temporary exemption of a new firm or investment from certain specified taxes.

Tax Incentive: refers to deductions, exclusion, or exemptions from a tax liability, offered as an enticement to engage in a specified activity (such as investment in capital goods) for a certain period.
# LIST OF ABBREVIATIONS AND ACRONYMS

<table>
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<tr>
<td>AGOA</td>
<td>African Growth and Opportunities Act</td>
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<td>ASEAN</td>
<td>Association of South East Asian Nations</td>
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<td>CIT</td>
<td>Corporate Income Tax</td>
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<td>EAC</td>
<td>East African Community</td>
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<td>EPZ</td>
<td>Export Processing Zones</td>
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<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FYAs</td>
<td>First-year Depreciation Allowances</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>KAM</td>
<td>Kenya Association of Manufacturers</td>
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<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<td>MNE</td>
<td>Multinational Enterprise</td>
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<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>SEC</td>
<td>Special economic zones</td>
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<td>SMEs</td>
<td>Small and Medium-Sized Enterprises</td>
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<td>SSA</td>
<td>Sub-Saharan Africa</td>
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<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>VAT</td>
<td>Value Added Tax</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<td>ROA</td>
<td>Return on Assets</td>
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<td>EU</td>
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<td>Cap</td>
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<td>IEA</td>
<td>Institute of Economic Affairs</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>VIF</td>
<td>Variance Inflation Factor</td>
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<td>OLS</td>
<td>Ordinary Least Squares</td>
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<td>FGLS</td>
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ABSTRACT

Manufacturing in Kenya has been on the decline for a considerable period of time with its contribution to Gross Domestic Product stagnating at 10 % from 1960’s. According to the Government of Kenya, the manufacturing sector has high, yet untapped potential to contribute to employment and Gross Domestic Product growth. Generally, the manufacturing sectors’ average growth percentage has continued to stagnate at three to four percent over the years. The performance of manufacturing sector is affected by several factors key of them being high costs of doing business. Excessive taxation in the form of high tax rate, double and multiple taxation are some of the challenges facing manufacturing industries. To mitigate this challenge, the government had advanced various tax incentives to the manufacturing sector. However, despite the various tax incentives being made towards these firms, their effect on their performance had not been investigated. Hence, this study sought to fill this gap. Therefore, the main aim of the study was to assess tax incentives and their effect on the performance of selected manufacturing firms in Kenya. Specifically, the study sought to; examine the effect of corporate income tax incentives capital allowance incentives, custom duty incentives and excise tax incentives on performance of selected manufacturing firms in Kenya. The study adopted a descriptive research design. The study population was all the 725 manufacturing firms in all the categories under the Kenya Association of Manufacturers directory as at 2016. The study used a sample of 90 companies which was obtained using simple random sampling. The study used panel data that was gathered using a secondary data collection template. A pooled panel regression model was used to test the significance of the effect of the independent variables on the dependent variable. STATA was used in conducting the analysis. The statistics that were generated included descriptive statistics and inferential statistics. The study period was 2017 and data was collected from 2011 to 2016. The study findings revealed that corporate income tax incentives received by the firms had the highest positive and significant effect on the performance of these firms. The findings also showed that the effect of capital allowance incentives on the performance of these manufacturing firms was positive and significant. It was found that custom duty incentives had a positive and significant effect on the performance of the firms even though their effect on performance was the least. The effect of excise tax incentives on the performance of the firms was also found to be positive and significant. The study findings recommended that the government needed to expand some of the tax incentives particularly capital allowances, excise tax incentives and custom duty incentives whose effect was yet to be fully felt within these firms compared to corporate income tax incentives. The study noted the need for greater diversification in the incentives granted and also greater sustainability. The study recommended the need for tax incentives among the firms so as to ensure the survival of a greater number of firms. The study also recommended the need for the government to conduct cost benefit analyses in order to ensure that the goals of granting such incentives are achieved. The study further recommends that policy makers should adopt strategic incentive plans or targeted incentive scheme that targets specific industry or a strategic tax incentive that add value or contribute positively to the economy through expansion of various sectors by cutting down on imports and in that way promoting the growth of demand for domestic products in the country. Through this, the government will be able curb smuggling, entry of contraband goods and also to promote the growth of the tourism industry as Kenya will become an industrial hub in the region.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Industrialization culminates from the sustenance of the productivity of firms over a period. It implies the value addition on factor input and its efficiency, where additional input should yield more firm output. It is expected that with increasing industrialization, the cumulative effect be seen in the creation of jobs for sustained growth and economic diversification. More so, industrialization 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, Belmondo, & Ibukun, 2015). Despite these identified benefits, most African countries have relied heavily on primary products as their main export commodity (UNECA, 2013) and the productivity of other sectors (apart from the primary sector- i.e. agriculture) such as the manufacturing sector have remained a source of concern to both the policy and research community. 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 have relocated or restructured their operations, opting to serve the local market through importing from low-cost manufacturing areas such as Egypt therefore resulting in job losses (Nyabiage & Kapchanga, 2014) citing turbulent operating environment and high operating costs. This is an indication that many manufacturing firms in Kenya are experiencing performance challenges with many reporting profit warnings due to challenges in the operating environment (RoK, 2014). One of the key drivers of the high cost of doing business facing manufacturing industries thereby impeding its development was the problem of excessive taxation in the form of high tax rate, double and multiple taxation (Uwalomwa et al., 2016). Hence, to mitigate this challenge, the government had advanced various tax incentives to the manufacturing sector.

According to Uwalomwa, Ranti, Kingsley, and Chinenye (2016), some of the problems faced by manufacturing industries include difficult and unfavorable operating environment due to infrastructural deficiency and unavailability of fund to finance capital projects like expansion. Another problem facing manufacturing industries thereby impeding its development is the
problem of excessive taxation in the form of high tax rate, double and multiple taxation. Although taxation forms one of the major sources of government, it may affect manufacturing firms negatively if not properly applied and administered. Thus higher tax rates serve as disincentive to firms for investment and expansion as it leaves firms with less money to reinvest. This eventually discourages productivity, investment and the level of output by the manufacturing industry Uwalomwa, Ranti, Kingsley, and Chineny (2016).

In a view of promoting investment and growth of the manufacturing sector, various governments have put in place various tax incentives to encourage the growth of local manufacturing industries and firms which is majorly aimed at reducing the amount of imported goods. Such tax incentives include tax holidays, tax reduction, capital allowances and also incentives on export processing zones. Most of the tax incentives towards the manufacturing sector were crucial strategies meant to reactivate ailing industries and also increasing the survival rates of firms and in the process, providing employment to thousands of unemployed people (Fakile & Uwuigbe, 2013).

1.1.1 Tax Incentives

According to Fletcher (2003), tax incentives are those special exclusions, exemptions, or deductions that provide special credits, preferential tax rates or deferral of tax liability. 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.

Tax incentives are defined by the UNCTAD (2000) as any measurable advantages accorded to specific enterprises or categories of business by (or at the direction of) a Government, in order to encourage them to behave in a certain manner, in Steven and Ana (2007) argument, tax incentives are any incentives that reduce the tax burden of enterprises in order to induce them to invest in a particular project or sector of the economy. 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, Cebreiro, and Bohmer (2007), tax incentives are much easier to provide than to correct deficiencies in the system, for example, in infrastructure or skilled labor 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 (Murray, 2013). The idea is informed by the fiscal theory of compensatory expenditure, which downplays the classical challenges of shifts in the allocation of resources emerging from taxation to a change from the incidence of individual loses and benefits to the economy (Sunday, Arzizeh & Eton, 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 a 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 (Easson and Zolit, 2013).

1.1.2 Tax Incentive Trends in Kenya

The SEZ Act provides incentives for industries to operate in designated zones, including Naivasha, near the Ol Karia geothermal power plants. Manufacturers in the SEZs in Naivasha will, for instance, be offered discounts on power bills because of lower transmission costs from the power plants to the industrial hubs. The Act provides for numerous tax incentives for investors, including exemption from all existing taxes and duties payable under the Customs and Excise Act, Income Tax Act, EAC Customs Management Act and Value-Added Tax Act (VAT) on all SEZ transactions. Enterprises in SEZs will enjoy several tax incentives under a tightly monitored set-up to avoid losses of government revenue. The preferential tax terms will include VAT exemption on all supplies of goods and services to enterprises, reduction in corporate tax to 10% from 30% for a period of 10 years of operation and 15% for the next 10 years. The government plans to freeze new investments within its EPZs before the end of this year as it
takes up the SEZ model. SEZs are currently undergoing a pilot programme in Mombasa, Lamu and Kisumu.

Manufacturing firms report wanting to register significantly more than services firms, but, again, this difference owes entirely to the furniture sector. A total of 70% of surveyed firms in the furniture industry reported wanting to register, and this was significantly higher than the 53% in the remaining manufacturing sector and 49% in the services sector. Costs associated with registering and taxes that registered businesses have to pay are the most common reasons for firms not registering. Indeed, taxes following registration were cited as a reason for not registering for 57% of the firms, followed by the cost of registering (56%), and no benefit from registering (47%).

The corporate tax rate for resident companies is 30% while non-resident companies are taxed at 37.5%. EPZs are taxed at 25% for the 10 years succeeding the tax holiday. ITA (2010) provides that private companies listing on the Capital Markets Authority should enjoy reduced corporate tax rates. Companies listing at least 20%, 30% and 40% of the issued share capital are taxed at 27% for three years, 25% for the five years and 20% for five years respectively (ITA, 2010). The 2015/16 Budget statement had proposed an amendment to the corporate tax rate for the listing of Small Medium enterprises on the Nairobi Stock Exchange by providing a favorable tax rate of 25%. There have been arguments that this incentive is biased against other companies trading in the same and does not create a level playing ground.

The Income Tax Act provides for various tax incentives through capital deductions. The government has allowed a claim of 150% for companies who invest outside the 3 cities and incur expenditures of more than 200 million. It has further been proposed in the Amendments to the Income Tax Act in the 2015/16 Budget statement 100% for ships from the initial allowance of 40% and capital deduction for buildings used for educational and training services to be increased from 50% to 100% (ITA, 2010).

1.1.3 Performance of manufacturing firms in Kenya

A firm can be measured how it performs financially by assessing how well it utilizes 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. According to Combs, Crook, &Shook, (2015),
dimensions of financial performance are: profitability, growth, and market worth Profitability measures firm’s past ability to generate returns (Glick. 2015).

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, Odhuno, Kambona, & Othuon, 2010). However, according to Jaworski and Kohli (1996), 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. There needs to be careful scrutiny of these different aspects of firm performance to quantify the actual performance achieved by the firm in a business year.

The manufacturing sector in Kenya grew at 3.5% in 2015 and 3.2% in 2014, contributing 10.3% to gross domestic product (GDP) (KNBS, 2016). 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. Kenya seems to have ‘peaked’ at a point much lower than in much of Asia.

1.1.4 Tax Incentives and Performance of Firms

Governments all over the world use tax incentives to enhance economic activities and investments by firms, they use these 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, 2011). In Kenya companies including those operating at EPZ 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.

Tax incentives are widely used by governments around the world 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, labor, or other costs (Njuguna, 2015). This acts as a catalyst for improved performance (Philips,
Incentives raise the return to capital thereby making investment in a location more attractive and in turn increase profitability of the firm. There are various types of fiscal incentives. These include government provision of below market interest loans, tax relief through the use of credits, deductions, or abatements, direct grants of land and facilities, and taxpayer financed work force training for targeted firms and industries (Bronos & McDonald, 2008). 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. 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 key of them being the manufacturing sector. Export Processing Zones (EPZ), 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 performance has not been investigated. Hence, this study seeks to fill this gap.

1.1.5 Manufacturing Firms in Kenya

The manufacturing industry accounted for 12% GDP in 2013/2014 (GOK, 2015). Despite Kenya’s manufacturing firms being viewed as small, they form the largest manufacturing

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industry in East Africa. The manufacturing companies are diverse. They include: Transformation and value addition of agricultural materials i.e. of coffee and tea, canning of fruit and meat, wheat, barley and cornmeal milling and refining of sugar. Production of electronics, assembly of motor vehicle and processing of soda ash are all parts of the sector. Assembly of computers was first done in 1987. Textiles, ceramics, cement, shoes, aluminum, steel, glass, wood, cork and plastics are other products manufactured in Kenya. Foreign investors own Twenty-five per cent of Kenya’s manufacturing sector most being from the United Kingdom followed by the Americans (KAM, 2015).

A study undertaken in the formal manufacturing sector which focused on analyzing data collected between 2006-2007 survey of the formal manufacturing firms and workers indicated that there has been zero productivity growth over the previous 12 years to 2003, with slight growth of 1.5% thereon to 2007 (World Bank, 2008). Among the major setbacks are Kenya’s manufacturing machinery and equipment is not up to date, is mostly overvalued and is inefficiently used and the costs of doing business is very high. The manufacturing sector contribution to GDP worsened from 9.6 percent in the year 2011 to 9.2 per cent in the year 2012, while the growth rate deteriorated from 3.4 percent in the year 2011 to 3.1 per cent in the year 2012. These adverse changes are attributed to high costs of production, stiff competition from imported goods, high costs of credit, drought incidences during the first quarter of 2012, and uncertainties due to the year 2013 general elections (KNBS, 2013). The manufacturing sector has high, yet untapped potential to contribute to employment and GDP growth (Government of Kenya, 2013). The manufacturing sectors’ average growth percentage has continued to stagnate at three to four percent over the years.

1.2 Statement of the Problem

The manufacturing sector in Kenya plays a fundamental role in developing the national economy, alleviating poverty and partnering with other larger corporations. They constitute a great source of service provision and local supply to larger corporations. Usually they have enormous local knowledge of resources, purchasing trends and supply patterns (Kwamboka, 2010). However, statistics from World Bank show that Kenyan manufacturers of large scale firms have registered stagnation and declining profits for the last five years due to a turbulent operating environment (World Bank, 2014). It is estimated that large manufacturing companies
have lost 70 per cent of their market share in East Africa largely attributed to high operational costs (RoK, 2014). In 2014, manufacturing sector in Kenya contributed barely 10% to the GDP which represented 3.4 per cent growth to Sh.537.3 Billion indicating a decline from the previous year 2013 where it had reported a 5.6 per cent growth mainly due to a challenging operating environment like high operational costs (KNBS, 2014). The manufacturing firms’ opportunities are large but the challenges are also substantial (Ekeno, 2010). According to GoK report (2013), performance of the manufacturing sector in Kenya has been on the decline for a considerable period of time with its contribution to GDP stagnating at 10 % from 1960’s (GOK, 2013). Generally, the manufacturing sectors’ average growth percentage has continued to stagnate at three to four percent over the years.

Gumo (2013) conducted a study on the effect of tax incentives on foreign direct investments (FDI) in Kenya but did not focus on financial performance. Hence, this study seeks to fill this gap by examining tax incentives and their influence on performance of selected manufacturing firms in Kenya. A research gap was also depicted in the studies conducted by Onyango (2015) examined the effect of tax incentives on financial performance of five-star hotels in Nairobi County, the study revealed a conceptual gap since it focused on the five-star hotels while the current study will focus on the manufacturing firms.

Tembur (2016) examined effect of tax incentives on financial performance of export processing zone firms in Kenya. The study portrays a conceptual gap as it focused on the export processing zone firms while the current study focuses on the manufacturing firms. The review also showed that most of the studies have been on corporate tax incentives and capital allowance incentives with less focus on excise and custom duty incentives 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 conducted in depth and only general discussions of tax had been given. The review also showed that the link between tax incentives and performance of firms majorly in the manufacturing sector had not been studied in depth in Kenya and much had been done in other countries such as Nigeria and Ghana (Agundu & Ohaka, 2013).

Hence, this study current study sought to fill these gaps by assessing tax incentives and their influence on performance in selected manufacturing firms in Kenya.
1.3 Purpose of the Study

The main purpose of the study was to assess tax incentives and their influence on performance in selected manufacturing firms in Kenya.

1.3.1 Specific Objectives of the Study

i. To determine the effect of corporate income tax incentives on performance in selected manufacturing firms in Kenya.

ii. To establish the effect of capital allowance incentives on performance in selected manufacturing firms in Kenya.

iii. To investigate the effect of custom duty incentives on performance in selected manufacturing firms in Kenya.

iv. To determine the effect of excise tax incentives on performance in selected manufacturing firms in Kenya.

1.4 Research Hypotheses

H₀₁: Corporate income tax incentives do not have a significant effect on performance in selected manufacturing firms in Kenya.

H₀₂: Capital allowance incentives do not have a significant effect on performance in manufacturing firms in Kenya.

H₀₃: Custom duty incentives do not have a significant effect on performance in selected manufacturing firms in Kenya.

H₀₄: Excise tax incentives do not have a significant effect on performance in selected manufacturing firms in Kenya.

1.5 Significance of the Study

The study findings will be of great value to government through various agencies by acting as basis for assessing the effectiveness of various tax incentives provided the government in promoting the performance of firms especially in the manufacturing sector and hence provide a framework and basis for reviewing the various tax policies based on the cost- benefit analysis provided which will enable the government to choose which incentives to give a priority or eliminate.
The study findings will also inform corporate tax payers and investors on how they can benefit from the existing tax incentives and provide a guideline for informed decisions on which tax incentives are more beneficial to exploit.

The study findings will contribute to the growing body of research in this area and help clarify the effect of tax incentives on performance of firms. The study will act as a reference point for other scholars who wish to pursue further research in this area and may provoke areas of further research.

1.6 Scope of the Study

The study was limited to assessing tax incentives and their influence on foreign direct investment performance in selected manufacturing firms in Kenya. The study specifically focused on corporate income tax incentives, capital allowance incentives, custom duty incentives and excise tax incentives and how they influenced performance of selected manufacturing firms in Kenya. The study population was all the 725 manufacturing firms in all the categories (large, medium and small- sized firms) under the Kenya Association of Manufacturers directory as at 2016. The study adopted a descriptive survey research design where data for the last 6 years (2011-2016) which was the most recent data was obtained using a secondary data collection template. The study period was 2017.

1.7 Limitation of the Study

The study was based on secondary data collected from these firms. Therefore, the quality of the study results depended purely upon the accuracy, reliability and quality of the secondary data sources which could not be proved. Approximation and relative measure with respect to the data source might have impacted the results. Sourcing data from the official websites of certain -firms required authorization which was a challenge. The researcher subscribed to these sites to be able to access the required information.

1.8 Organization of the Study

The project is made up of five chapters. Chapter one presents the background of the study. Chapter two, literature review, brings in the various theories that have been discussed on the relationship between corporate income tax, capital allowance incentives, exercise tax incentives, custom duty incentives and performance of firms. An empirical analysis of studies previously
done on tax incentives, corporate income tax, capital allowance incentives, exercise tax incentives, custom duty incentives and performance of firms is discussed in this chapter. In addition, an overview of the theories and empirical literature is done. Chapter three, methodology, presents the design, data collection instruments, data collection procedure, data analysis and presentation, and time series analysis. Chapter four brings out the empirical results while chapter five contains summary, conclusions and policy implications.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews the scholarly literature related to tax incentives and their influence on foreign direct investment performance in selected manufacturing firms. It consists of the theoretical and empirical literature in different areas that were covered in support of the research study as well as highlighting the conceptual framework for study that showed the relationship between independent and dependent variables. In the empirical, the findings were critiqued to establish the knowledge gaps.

2.2 Theoretical Framework

2.2.1 Normative theory

The theory describes how the development of the institutional structure of government creates a set of incentives as well as constraints within which governments and other actors operate (Cochran, 1999). These incentives shape the path of development, and different governments may evolve in different ways, not all of which are efficient. Tax policy-making and tax administrative reform therefore evolve simultaneously and symbiotically. The institutional theory developed here provides a generalized framework that can be used to better understand the development of tax policy and administration across time and cultures. It offers an attractive model for description, explanation and prediction.

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

Boadway and Shah (1995) argue that any benefit such as an incentive allocated by public servants or politicians is potentially open to abuse and corruption. There is therefore a strong argument that incentives should be automatically available to all investors who meet a set of
open and transparent criteria. However, an alternative argument is that firms should receive just enough incentive to induce them to invest, and no more. Each potential investment therefore needs to receive an incentive specific to its particular situation. Clearly, which of these two alternatives the government chooses depends on the strength of governance within the appropriate institutions. If public servants and politicians retain decision-making power over the allocation of incentives, then the processes and outcomes need to be as transparent as possible. This theory was relevant in explaining the factors that affect the effectiveness of tax incentives in influencing the performance of firms within the economy as well as the costs and benefits of tax incentives to the country.

2.2.2 Neo-classical Theory

Neo-classical theory argues that providing tax incentives to one group of investors rather than another violates one of the principal tenets of a good tax system, that of horizontal equity. This inequality distorts the price signals faced by potential investors and leads to an inefficient allocation of capital (Boadway & Shah, 1995). The justification most often given for special incentives is that there are market failures surrounding the decision to invest in certain sectors and locations, which justify government intervention. Market failures result in either too much or too little investment in certain sectors or locations. The key market failures most often cited; Positive externalities not internalized in the project’s rate of return are higher in certain sectors than in others. An example is research and development where investment yields a higher social than private rate of return because not all the technological knowledge can be effectively patented and as such there exists a justification for subsidizing research and development investment (Kaplan & Norton, 2001).

Barbour (2005) points out that there are other purported benefits of tax incentives, such as symbolic signaling effects and the need to compensate for inadequacies in the investment regime elsewhere. Provision of investment incentives is in the form of either tax relief or cash grants. International experience shows that such incentives play only a minor role in investment decisions. Firms make investment decisions based on many factors including projections of future demand, certainty about future government policy, prevailing interest rates and moves by competitors. In general, they see incentives as ‘nice to have’ but not deal breaking. Yet incentives remain a popular policy for both developed and developing countries.
This theory formed the basis of the study objectives of assessing the effectiveness of each tax incentive granted in influencing the performance of manufacturing firms. It formed the basis for clarifying whether tax incentives on their own could achieve the intended purpose of reviving and stabilizing the performance of the firms under study.

2.2.3 Optimal Tax Theory

Optimal tax theory is the study of how best to design a tax to minimize distortion and inefficiency subject to raising set revenues through distortionary taxation (Mirrlees, 1976). A neutral tax is a theoretical tax which avoids distortion and inefficiency completely. Other things being equal, if a tax-payer must choose between two mutually exclusive economic projects (say investments) that face the same pre-tax risk and returns, the one with the lower tax or with a tax break would be chosen by the rational actor.

With that insight, economists argue that generally taxes distort behavior. For example, since only economic actors who engage in market activity of "entering the labor market" get an income tax liability on their wages, people who are able to consume leisure or engage in household production outside the market by say providing housewife services in lieu of hiring a maid are not taxed or are taxed lightly.

The incidence of sales taxes on commodities also leads to distortion if say food prepared in restaurants are taxed but supermarket bought food to be prepared at home are not taxed at purchase. This differential taxation of commodities may cause inefficiency (by discouraging work in the market in favor of work in the household). Ramsey (1927) developed a theory for optimal commodity sales taxes. The intersection on downward sloping demand curve and upward sloping supply curves implies that there is producer surplus and consumer surplus. Any sales tax reduces output and imposes a deadweight loss (DWL). If we assume non varying demand and supply elasticity’s, then a single uniform rate of tax on all commodities would seem to minimize the sum area of all such DWL triangles. Ramsey proposed that we assume suppliers were all perfectly elastic in their responses to price changes from tax and then concluded that taxes on goods with more inelastic consumer demand response would have smaller DWL distortions. The DWL triangles are now called Harberger triangles (after Arnold Harberger). Modern theory of optimal taxation looks for marginal deadweight losses, and can be used to
evaluate the efficiency of tax reforms (Mayshar, 1990). This theory forms the basis of the main objective in this study.

Optimal tax theory is relevant to this study since it informs Excise Tax Incentives. EPZ's Firms that are eligible for VAT Incentives and Excise Tax Incentives pay less tax and hence post higher return on assets (ROA) and return on equity (ROE) which is derived from profit from tax (Ohaka & Agundu, 2012). Tax incentives also make investments more attractive and in turn enhance profitability of a firm. Some of the studies which have used this theory include Dynarski and Scott-Clayton (2006), Kopczuk and Slemrod, (2006) and Saez & Stantcheva (2016).

2.3 Empirical Review

This section contains review of studies and literature from other scholars.

2.3.1 Corporate Income Tax Incentives and Performance

Gatsi, Gadzo and Kportorgbi (2013) conducted a study on the effects of corporate income tax on financial performance of listed manufacturing firms in Ghana. The study used panel data methodology covering ten listed manufacturing firms over seven years to empirically determine the effect of corporate income tax on financial performance. The study revealed that there is a significant negative relation between corporate income tax and financial performance. On the other hand, firms’ size, age of the firm and growth of the firm show a significant positive relationship with financial performance. The study concentrated on corporate income tax without looking into the effect of tax incentives on the performance of manufacturing firms.

Chukwumerije and Akinyomi (2011) examined the impact of the tax incentives on the overall performance of registered small scale industries in Rivers State, Nigeria. Eleven, out of the twenty two registered small scale food and beverages manufacturing industries in Rivers State were selected randomly for the study. Questionnaires were administered to 260 respondents in the selected. Frequency distribution and chi-square were used in the analysis of data and hypotheses testing respectively. The findings revealed that there are various tax incentives available to small scale industries and the operators in these industries are very familiar with them. It was also discovered that tax incentives do significantly affect the profitability, staff strength and the growth and development of small scale industries positively. The study assumed
that tax incentives are spread all levels in the manufacturing sector by considering small scale industries only. In reality most tax incentives are aimed at promoting large scale manufacturing.

Rohaya, Nor’Azem and Bardai (2010) conducted a study on corporate income taxes and revealed an association between income tax and profitability of corporate institutions. The study related to the impact of corporate income tax liabilities on different variables of a firm as gross profit, cost of sales, expenses etc. The study covered 10 manufacturing companies for a period of 7 years spanning from 2005 to 2012. The descriptive - causal research design was employed with the panel data methodology as the analysis method. The study has found that, there is a significant negative relation exist between corporate income tax and financial performance on the other hand firms’ size, age of the firm, growth of the firm shows a significant positive relationship with financial performance. The study concentrated on corporate income tax without looking into the effect of tax incentives on the performance of manufacturing firms. The use of purpose sampling method to select ten samples may have resulted to a sampling error.

Alhulail (2014) examined the effects of tax incentives on sales of eco-friendly vehicles in Japan. The study used a sample of 10 vehicles in Japan that fall under eco-friendly cars for the period April 2006 to March 2013. The study obtained secondary data and analyzed using regression analysis. The study finds that the tax incentives have a significant positive effect on sales of eco-friendly vehicles.

Uwaume and Ordu (2014) carried out a study to establish the impact of tax incentives on economic development in Nigeria from years 2004 to 2014. The population of the study involved 51 respondents from management, tax payers and staff of selected manufacturing firms in the South-South political zones of Nigeria. The study found that sufficient tax incentives enhanced industrial growth and economic development and recommended the government waive certain taxes on corporate bodies to help them mature especially at their early stage, the government should not focus on the revenue that is lost at this point because the benefits will surpass in the long-run what is lost at the initial times.

2.3.2 Capital Allowance Incentives and Performance of Firms

Onyango (2015) sought to establish the effect of tax incentives on financial performance of Five-Star hotels in Nairobi County. The study adopted the use of quantitative descriptive design. For the purpose of the research, the population constituted all the seven Five-Star hotels
in Nairobi County. A census was conducted for all the seven Five-Star hotels using a questionnaire. The response rate attained was 100%. The data collected was provided by Management Accountants of the Five-Star Hotels. It was found out from the regression and correlation analysis that there was a negative relationship between investment deduction and industrial building deductions and financial performance of five star hotels in Nairobi County. The study also concluded that Wear and tear allowances positively influenced the financial performance of five star hotels in Nairobi County. Tax incentives are to be enjoyed by all tax payers as per the taxation cannon of equality (Musgrave, 2005) but in this study, the researcher considered only seven star hotels which is a small proportion of the hospitality players in Nairobi County.

Mayende (2013) analyzed 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 show that firms with tax incentives perform better in terms of gross sales and value added than their counterparts. The results indicated the importance to government to strengthen the provision of tax incentives to firms in an effort to promote development in the manufacturing sector. This required that provision of tax incentives to be transparent, non-discriminatory of ownership of firms and a criterion of accessibility is clear. Comprehensive information on procedures and criteria for obtaining tax incentives under each existing programs needed to be frequently availed to the public. This would lead to increased output of different firms and ensure accountability and guard against miss-use of the incentives. The study period was 3 years which could be a limitation.

Agundu and Ohaka (2013) examined the extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector. The corporate financial performance attractions considered were profit after tax (PAT), return on total assets (ROA), and return on shareholders’ equity (ROE). Financial data accessed for analysis related to 58 manufacturing firms quoted on the Nigerian Stock Exchange (NSE). Statistical results such as coefficients of correlation and determination emerging from the process justified the potency of capital allowance as it was significantly associated with PAT, ROA and ROE. In the light of the analytical revelations, it was imperative for accounting and finance executives in Nigerian manufacturing firms to professionally enumerate and profile their investments in qualifying industrial assets in accordance with extant tax guides in order to
benefit from capital allowance grants. The attractiveness of financial economies of capital allowance notwithstanding, manufacturing sector investors should exercise restraint and avoid indiscriminate industrial asset requisition and expansion.

Githaiga (2013) carried out a research to establish the impact of tax incentives on FDI inflows of firms listed at the NSE. His focus was on the impact of ID, IBD, and wear and tear towards attracting FDI inflows. The population included 60 firms listed at NSE while the sample included 10 firms selected using simple random method. The study adopted secondary data where data relating to FDI and incentives were collected from annual reports and audited financial statements covering a period of 2008-2011. For data analysis, Microsoft excel sheets was used to analyze quantitative data while SPSS was used to analyze qualitative data with an aid of a conceptual model. Correlation analysis carried out on FDI and tax incentives variables showed that tax incentives impacted on FDI inflows of firms listed at NSE. Wear and tear had a strong relationship with FDI.

2.3.3 Excise Tax Incentives and Performance of Firms

Regioplan Policy Research and EY (2014) carried out a study focusing on the economic impact of high excise duties and/or the changes in excise duty implemented by national governments. Analysis of increases in excise duty in the EU (2008-2012) showed that high excise duty rates (such as the ones in the Nordic countries) impacted negatively on the economy. In addition to negative effects on employment, excise duty increases also ultimately failed to bring about a proportional increase in total beer-generated government revenues. In eight of the seventeen countries in which an excise duty increase was implemented (16 EU countries and Norway) beer-generated government revenues even decreased. Both member states operating with lower levels of taxation and consumers benefited from the free movement of goods within the EU allowing consumers to choose where they buy goods from. However for those member states that chose to apply high rates of taxation - such as the Nordic Members States – there were clear consequences in relation to loss of sales, revenues and jobs.

Njuru, Ombuki, Wawire, and Susan (2013) investigated the impact of taxation on private investment in Kenya. Vector auto-regression technique was used to achieve study objectives. Time series research design was used covering period 1964-2010. The study found that VAT, income tax and establishment of Kenya Revenue Authority (KRA) had negative impact on
private investment while excise tax, import tax and tax amnesty impacted positively on private investment. The effect of one standard deviation shock on excise duty took thirty eight semi-annual periods to fizzle out. The effect was initially on the negative side for six semi-annual periods, and then moved to positive territory for thirty two semi-annual periods, before moving to the equilibrium. This suggests that excise duty has a mixed effect on the private investment and the effect is felt for long in the economy. Since the impact was mostly on the positive territory the study concluded that excise tax is more of an encouragement to private investment. The study concluded appropriate tax system and progressive tax reforms were necessary to ensure that private investors are given enabling environment to establish.

According to Chabari (2010), tariff and other indirect taxes are rather important tax sources for governments in many developing countries, such as Kenya, where the actual direct tax (income tax) collection is well below the potential/legal tax ceiling. Foregoing such an important source of income may not be a trivial policy choice. More specifically, if domestic firms do not benefit from functional drawback policies, the tariff free inputs for the firms in the EPZs acts as import subsidies competing against domestic input production and discouraging creation of backward linkages. If countries do not allow domestic sales of EPZ products, the potential for forward linkages vanishes as well.

Murage (2012) conducted a research on the effect of tax incentives on investment of EPZ firms in Kenya. The study sought to establish various types of tax incentives offered to EPZ firms on their business investments as well as their effects on investments. The population of the study included 104 EPZ firms in Kenya. A sample of 65 firms were selected purposively those situated in the Nairobi Metropolitan. Primary and secondary data was collected using questionnaires. Pearson’s product moment correlation co-efficient was used. Descriptive statistical techniques were utilized in data analysis while inferential analysis was used to reach conclusions. The findings were that investments by EPZ firms increase with increase in sales, profit as well as tax incentives. However the influence of tax incentives on investments by EPZ firms is insignificant. The study recommended the Kenyan government to consider other incentives other than tax that will enhance sales.

A study by Wachira (2011) sought to establish effectiveness of tax incentives as an avoidance scheme by Kenya Airways and to modify the financial situation and make investments
across the board. A semistructured questionnaire involving both open and closed ended questionnaires was used to collect primary data from tax manager and officers from tax department of Kenya Airways. For data analysis, Statistical Package 19 or Social Science was used. The study found out that Kenya Airways took advantage of all available tax deductions both business and personal. The study found the tax incentives to be effective and recommended that tax holidays and investments allowances and tax credits to be provided to employees as a motivational initiative.

**2.3.4 Custom Duty Incentives and Performance of Firms**

Rapuluchukwu, Belmondo, and Ibukun (2016) investigated the impact of fiscal incentives on firms’ productivity using Cameroonian firms as a case. The study used data from the World Bank Enterprise Survey for over 300 firms to calculate the productivity of firms. The Enterprise Survey also contains unique measures of assessing firms’ beneficiary status from different categories of fiscal incentives such as import duty exemption, profit tax exemption and export financing. The availability of these measures at the firm level allowed the researcher to conduct an impact analysis using the propensity score matching technique. The results showed a significant and positive impact of the productivity of firms that benefited from profit tax exemption and export financing. However, when considering import duty exemption, the significance of this variable was not consistent. The study thus provided support for the argument that the government’s involvement in the firm should be targeted at rewarding outputs and not supporting processes, and thus provided an essential element of a strategy for industrialization.

Amariati (2013) sought to determine the financial factors that affected the profitability of manufacturing companies listed in the NSE in Kenya. The study found that the tax regime affects the profitability of manufacturing firms where a majority of the respondents indicated that high taxes levied led to high commodity prices. High taxes are levied on imports and on inputs hence high production cost which further reduces the manufacturing firms’ profits.

Mario and Florin (2011) aimed at identifying formal and informal institutional factors in custom procedures and their impact on the performance of small and medium-sized enterprises (SMEs) involved in international trade in Kosovo based on a questionnaire conducted in 2009. The econometric findings showed that one of the most important obstacles encountered by SMEs was
regular appeals against customs decisions that were assumed to be inter alia a consequence of frequent changes in over-complicated laws and regulations. However, there was a positive and significant effect of the formal customs institutions that facilitated the trade of imported goods, namely of so-called customs procedures with economic impact.

Custom duty incentives have always been a prominent and disputed matter. On the one hand, some scholars stand for their adoption, especially by developing countries (Chang & Chang, 2005). They assert that economic theory suggests that subsidies are not as trade distorting as other trade instruments which affect two margins both the producer’s and the consumer’s, whereas incentives affect one margin only the producer’s. On the other hand, it is argued that export subsidisation distorts free trade; such subsidies cut into the exports of the countries that have a natural comparative advantage in those products and so distort the world’s allocation of resources (Irwin, 2009).

A recent study by Desai, Foley and Hines (2014) documented that tax payments other than income taxes such as general or specific sales taxes, import duties and property taxes are usually much larger than income taxes for US multinationals. Each of those taxes will typically influence corporate decisions, and, again, it might be multinationals which are most sensitive to those taxes as they are carrying out production and sales in several countries. However, little is known about the consequences of taxes other than income taxes on decisions of multinationals. Desai et al., (2004) provided some evidence for the case of U.S. multinationals pointing at a rather strong sensitivity of corporate decisions to differences in indirect taxes roughly at the same degree as the sensitivity to differences in income taxes.

2.4 Critique of Literature Review and Research Gaps

The literature review showed that a number of studies had been conducted to show the relationship between various tax incentives and performance for instance; Chukwumerije and Akinyomi (2011), Gatsi, Gadzo and Kportorgbi (2013), Onyango (2015) and Agundu and Ohaka (2013). The review showed that much concentration had been on corporate tax incentives and capital allowance incentives with less focus on excise and custom duty incentives 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 conducted in depth and only general discussions of tax had been given. The review also showed that the link between tax
incentives and performance of firms majorly in the manufacturing sector had not been studied in depth in Kenya and much had been done in other countries such as Nigeria and Ghana. These studies are summarized below;

Table 2.1: Summary of Literature Review and Research Gaps

<table>
<thead>
<tr>
<th>Author</th>
<th>Focus of the study</th>
<th>Findings</th>
<th>Knowledge gaps</th>
<th>Focus on the current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatsi, Gadzo and Kportorgbi</td>
<td>The investigation concentrated on the effects of corporate income tax on financial performance of listed manufacturing firms in Ghana</td>
<td>The study revealed that there is a significant negative relation between corporate income tax and financial performance.</td>
<td>The study focused only on the effects of corporate income tax on financial performance of listed manufacturing firms in Ghana</td>
<td>Current study focused on tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
</tr>
<tr>
<td>Chukwumerije and Akinyomi</td>
<td>The paper was on impact of the tax incentives on the overall performance of registered small scale industries in Rivers State, Nigeria</td>
<td>The research concluded that tax incentives do significantly affect the profitability, staff strength and the growth and development of small scale industries positively</td>
<td>The study only looked at the impact of the tax incentives on the overall performance of registered small scale industries.</td>
<td>The study did not focus on the tax incentives and their influence on performance, which the current study was aimed at.</td>
</tr>
<tr>
<td>Rohaya, Nor’Azem and Bardai System</td>
<td>Corporate income taxes and revealed an association between income tax and profitability of corporate institutions</td>
<td>The study found there is a significant negative relation exist between corporate income tax and financial performance</td>
<td>Focused on corporate income tax and financial performance</td>
<td>Failed to look at the tax incentives and their influence on performance, especially manufacturing firms</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Summary</td>
<td>Focus</td>
<td>Object Focus</td>
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<td>------------------------</td>
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<tr>
<td>Alhulail (2014)</td>
<td>Effects of tax incentives on sales of eco-friendly vehicles in Japan</td>
<td>Tax incentives have a significant positive effect on sales of ecofriendly vehicles.</td>
<td>Focused on effects of tax incentives on sales</td>
<td>Current study focused on tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
</tr>
<tr>
<td>Maxwell Onyango (2015)</td>
<td>Effect of tax incentives on financial performance of Five-Star hotels in Nairobi County.</td>
<td>The study found that there was a negative relationship between investment deduction and industrial building deductions and financial performance of five star hotels in Nairobi County.</td>
<td>Focused on Effect of tax incentives on financial performance of Five-Star hotels</td>
<td>Current study aimed to look at tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
</tr>
<tr>
<td>Authors</td>
<td>Study Title</td>
<td>Focus</td>
<td>Findings</td>
<td>Current Study Focus</td>
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<tr>
<td>Agundu and Ohaka (2013)</td>
<td>Extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector</td>
<td>The Study found out that potency of capital allowance was significantly associated with PAT, ROA and ROE.</td>
<td>Study focused on credit Extent to which capital allowance served as veritable captivating investment incentive to stakeholders.</td>
<td>Current study aimed to look at tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
</tr>
<tr>
<td>Githaiga (2013)</td>
<td>Impact of tax incentives on FDI inflows of firms listed at the NSE</td>
<td>The study concluded that tax incentives impacted on FDI inflows of firms listed at NSE. Wear and tear had a strong relationship with FDI.</td>
<td>Focused on FDI inflows of firms listed at the NSE.</td>
<td>Current study aimed to look at tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Summary</td>
<td>Current study</td>
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<tr>
<td>Rapuluchukwu, Belmondo, and Ibukun (2016)</td>
<td>The impact of fiscal incentives on firms’ productivity using Cameroonian firms</td>
<td>The study concluded that there is significant and positive impact of the productivity of firms that benefited from profit tax exemption and export financing.</td>
<td>Current study looked at other factors apart from productivity of firms and tax exemptions</td>
<td></td>
</tr>
<tr>
<td>Amariati (2013)</td>
<td>The financial factors that affected the profitability of manufacturing companies listed in the NSE in Kenya</td>
<td>The study found that the tax regime affects the profitability of manufacturing firms where a majority of the respondents indicated that high taxes levied led to high commodity prices</td>
<td>Current study concentrated on tax incentives and their influence on performance in selected manufacturing firms in Kenya.</td>
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</table>

Source: Researcher (2018)

2.5 Conceptual Framework

Conceptual framework is a systematic presentation which identifies the variables that when put together explain the issue of concern. The conceptual framework is therefore the set of broad ideas used to explain the relationship between the independent variables (factors) and the dependent variable (outcome) by the researcher.
Based on Figure 2.1 above, the dependent variable is performance while the independent variables are represented by the corporate income tax incentive, capital allowance incentives, customs duty incentives and excise tax incentives.

The researcher conceptualized that corporate income tax was measured as the amount due to the tax authority from the firm activities that result into a profit with the incentive being the amount due that was waived.

Further, the researcher considered capital allowance to be measure of the sum of money a business can deduct from the overall corporate or income tax on its profits.

In order for a country to stimulate its exports, custom duty incentives have to be applied in abundance to give the country a competitive edge. The indirect tax levied on the sale of a commodity constitutes what is referred to as excise tax. An individual consumer does not
directly pay the tax but rather it is first levied by the Internal Revenue Service on the producer as the incidence of the tax and then the producer adjusts the price of the product to factor in the value of the tax. The final price of the commodity reflects the excise duty that is borne by the consumer.

As the dependent variable, the researcher conceptualized that performance can be defined as elements that will lead to efficiency in operation, enable the growth of a business, and be able to react to the opportunities and threats that are presented by the environment in which a business operates. The traditional approach involves analyzing major financial indicators of the organization over time with the researcher focus being on profitability.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used in carrying out the study. It outlines the: research design, target population, research sample, data collection method and data analysis.

3.2 Research Design

The study adopted descriptive survey design. According to Arvind and Vijay (2013), a descriptive survey is associated with the description of facts of a study. The design was considered appropriate for this study as it will assist in an in-depth investigation to examine tax incentives and their influence on performance in selected manufacturing firms in Kenya. This research design allows a detailed description and analysis of the variables under study; descriptive design allows the description and presentation of their accurate profiles as it exists without influencing it in any way and explaining their relationship without manipulation as supported by Saunders et al. (2009). Further explanatory research design produces results that are holistic, contextual and rich in detail on the subject of the study. This design allowed an inductive and deductive reasoning to arrive at generalization of the study findings on the influence of tax incentives on the performance of manufacturing firms in Kenya.

Further this research design was appropriate for this study since the problem under study was structured and well understood, therefore requiring precise rules and procedures regarding collection and analysis of data to test the hypotheses as supported by Bryman and Bell (2007).

3.3 Target Population

Sekaran (2006) defines a population as the total collection of elements about which inferences are made. It refers to all possible cases which are of interest for a study. It is the large collection of all subjects from where the needed sample is drawn. The study population was all the 725 manufacturing firms in all categories (large, medium and small) under the Kenya Association of Manufacturers directory as at 2016 (Kenya Association of Manufacturers, 2017)
3.4 Sample Size and Sampling Techniques

Kothari (2004) defines a sample as the selected respondent representing the population. A sample is a set of entities drawn from a population with the aim of estimating characteristics of the population (Crammer & Howitt, 2004). According to Kothari (2004) who argued that 10% or more of a large sample is adequate for a descriptive study. Therefore, the study used a sample of 90 companies. The observations were selected using simple random sampling technique. Simple random sampling is the basic sampling technique where a group of subjects is selected for study from a population. Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample (Kothari, 2004). The sample size for this study was determined by using the formulae suggested by Krejcie and Morgan (1970);

\[ S = \frac{X^2NP (-P)}{d^2(N-1) + X^2P (1-P)}. \]

Where;

S = required sample size
N = given population size
P = Population proposition that for table construction (0.50 is assumed as this magnitude yields the maximum possible sample size required).

\( d \) = the degree of accuracy as reflected by amounting error that can be tolerated in the fluctuation of a sample proportion p about the population proportion \( p \)- that is the degree of accuracy expressed as a proportion.

\( X^2 \) = table value of chi square for one degree of freedom relative to the desired level of confidence, which is 3.841 for the 0.95 confidence level.

The study chose confidence level at 95 per cent with corresponding z-score of 1.96 and with error margin of 5 per cent. Hence the study assumed that data collected using as sample size would have a 95% chance of being right (level of confidence) with a 5% chance of being wrong.

3.5 Data Collection Instruments and Procedures

Data collection refers to the process of gathering raw and unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Gall,
In order to achieve the objective of this study, secondary data for a six year period was collected from the annual reports and also from the firms’ internal sources in line with the specific variables of the study. The secondary data was obtained using a secondary data template (Appendix II). The study used panel data collected annually for a period of 6 years from the year 2011 to the year 2016. A combination of time series with cross-sections enhances the quality and quantity of data to levels that would otherwise be impossible to achieve with only one of the two dimensions (Gujarati, 2003). Authorization from the University and also the firms was sought before the data was collected.

### 3.6 Empirical Model

In order to analyze the effect of tax incentives on performance of manufacturing firms in Kenya, the study modified the pooled panel data model used by Ban˜os-Caballero, et al. (2012) as depicted in equation 3.1. The study employed a pooled panel data regression model to analyze the effect of tax incentives on performance of manufacturing firms in Kenya. Panel data contains observations of multiple phenomena obtained over multiple time periods for the same firms or individuals (Hsiao, 2003). The data is preferred because it reveals changes at the individual firms’ level, establishes time order of variables and shows how relationships emerge (Frees, 2004). Since the study focused 90 manufacturing firms, using cross-section data alone would give a small sample but incorporating the time series of 6 years, the sample expanded to 540 observations. The resultant large sample made it possible for the study to satisfy asymptotic requirements (Gujarati, 2003).

The general empirical model used in the study is defined as follows:

\[ Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \]  \hspace{1cm} (3.1)

Where: \( Y_{it} \) is the dependent variable denoting performance of manufacturing firm \( i \) at time \( t \); \( t \) denotes the observation (firm), \( i = 1, \ldots, 30 \) while \( t \) is the time period, \( t = 2011, \ldots, 2016 \); \( X_{it} \) denotes a vector of independent variables, \( \beta \) are coefficients to be estimated, \( \alpha \) is a constant term, and \( \varepsilon_{it} \) is a composite error term.

Equation 3.1 was expanded to obtain equations 3.2 which were used for estimation.

\[ NP_{it} = \alpha + \beta_1 CITI_{it} + \beta_2 CAI_{it} + \beta_3 ETI_{it} + \beta_4 CDI_{it} + \varepsilon_{it} \]  \hspace{1cm} (3.2)
Where;

\[ \text{NP}_t = \text{Net Profits of firm } i \text{ at time } t; \]

\[ \text{CITI}_t = \text{Corporate income tax that has been waived for firm } i \text{ at time } t; \]

\[ \text{CAI}_t = \text{Capital allowances received by firm } i \text{ at time } t; \]

\[ \text{ETI}_t = \text{Excise tax incentives that firm } i \text{ has benefited at time } t; \]

\[ \text{CDI}_t = \text{Custom duty incentives that firm } i \text{ has benefited at time } t; \]

\[ \alpha = \text{Constant term}; \]

\[ \beta_s = \text{Coefficients of the explanatory variables}; \]

Subscript \( i \) = Firms (cross-section dimensions) ranging from 1 to 90;

Subscript \( t \) = Years (time-series dimensions) ranging from 2011 to 2016;

\[ \varepsilon_{it} = \text{Composite error term of the model.} \]

### 3.7 Data Analysis

Data analysis can be defined as the process of computing various summaries and values from a collection of data (Berthold & Hand, 2003). Burns and groove (2003) define data analysis as a mechanism for reducing and organizing data to produce findings that require interpretation by the researcher. The panel data obtained was analyzed using descriptive statistics, correlation analysis, and panel regression analysis. The panel methodology was supported by STATA software. Feasible Generalized Least Square estimation was performed after accounting for various violations of classical linear assumptions. There are three ways of estimating a panel data model namely, the Pooled Ordinary Least Square (OLS) regression model, Fixed Effect (FE) model and Random Effect (RE) model. The choice of these methods depends on whether the individual cross-section effects are considered to be constant, fixed or random (Baum, 2006). Consequently, all three models were estimated and then the necessary tests applied before choosing the appropriate model. However, the idea that the unit-specific effects did not differ in Pooled OLS regression model made it very restrictive and usually unrealistic. As argued by Baum (2006), Pooled OLS regression can have a complicated error process such as heteroskedasticity across panel units and serial correlation within panel units. Due its severe limitations, the decision had been taken in this study to consider only FE or RE models.
3.7.1 Diagnostic Tests

Estimating these equations when the assumptions of the linear regression are violated runs the risk of obtaining biased, inefficient, and inconsistent parameter estimates (Brooks, 2008). Consequently, the Multicollinearity, autocorrelation, Heteroskedasticity were conducted to ensure proper specification of equation 3.1.

3.7.2 Normality Tests

The normality assumption is required in order to conduct single or joint hypothesis tests about the model parameters (Brooks, 2008). In order to check if the data was normally distributed, the Skewness-Kurtosis (Jarque-Bera) test for normality was conducted. The null hypothesis under Jacque Bera test was that the distribution of the data was not significantly different from that of a normal distribution. The study tested the null hypothesis that the disturbances are not normally distributed. If the p-value is less than 0.05, the null of normality at the 5% level will be rejected. Since the variables were found not to be normally distributed, the conversion of data to natural logarithms instead of absolute values was undertaken.

3.7.3 Multicollinearity

Multicollinearity was tested in the study using VIF whereby the cut-off point for severe Multicollinearity is VIF>10. Failure to account for perfect Multicollinearity results into indeterminate regression coefficients and infinite standard errors while existence of imperfect Multicollinearity results into large standard errors. Large standard errors affect the precision and accuracy of rejection or failure to reject the null hypothesis. During estimation, the problem is not the presence of Multicollinearity but rather its severity. A VIF greater than 10, thus, indicates the presence of Multicollinearity.

3.7.4 Autocorrelation

Since the data involves both cross section and time-series, it raises the suspicion of the existence of serial correlation. The presence of serial correlation indicates that the variables in the model violate the assumptions of the regression (Anderson et al., 2007). To cater for serial correlation, the Woodridge test for autocorrelation will be employed. Serial correlation is a common problem experienced in panel data analysis and has to be accounted for in order to achieve the correct model specification. According to Wooldridge (2002), failure to identify and account for serial
correlation in the idiosyncratic error term in a panel model would result into biased standard errors and inefficient parameter estimates. The null hypothesis of this test is that the data has no serial correlation. If the serial correlation is detected in the panel data, then the Feasible Generalized Least Squares (FGLS) estimation will be adopted.

3.7.5 Heteroscedasticity

Since the data for this research is a cross-section of firms, this raises concerns about the existence of heteroscedasticity. The CLRM assumes that the error term is homoskedastic, that is, it has constant variance. If the error variance is not constant, then there is heteroscedasticity in the data. Running a regression model without accounting for heteroscedasticity would lead to unbiased parameter estimates. To test for heteroscedasticity, the Breusch-Pagan/Godfrey test will be used. The null hypothesis of this study will be that the error variance is homoskedastic. If the null hypothesis is rejected and a conclusion made that heteroscedasticity is present in the panel data, then this would be accounted for by running a FGLS model.

Table 3.1: Operationalization and Measurement of Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Operationalization</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Dependent variable</td>
<td>• Profitability</td>
<td>• Total revenue-Total expenses</td>
</tr>
<tr>
<td>Corporate Income tax incentives</td>
<td>Independent variable</td>
<td>• corporate income tax incentive</td>
<td>• % of the applicable profits</td>
</tr>
<tr>
<td>Capital allowance incentives</td>
<td>Independent variable</td>
<td>• capital allowances incentive</td>
<td>• Investment Deductions at 100-150% of the value</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Industrial Building Deductions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Wear and Tear Allowance depending with the class</td>
</tr>
<tr>
<td>Excise tax Incentives</td>
<td>Independent variable</td>
<td>• excise tax incentive</td>
<td>• Internal Revenue Service (IRS) levies that are taxed on the producers</td>
</tr>
<tr>
<td>Custom duty incentives</td>
<td>Independent variable</td>
<td>• custom duty incentive</td>
<td>• % of the declared value</td>
</tr>
</tbody>
</table>

Source: Researcher (2018)
3.8 Ethical Considerations

Ethics is described as the study of normative behavior of our conduct. Research ethics is applied ethics in that it tries to resolve not only general issues but also specific problems that come up when conducting the research. It also includes the assessment of whether the so called research violates the basic moral principles or if it is harmful to the identified population (Penslar, 1995).

Conducting any research one must have integrity, respect and ensure that the information relayed is honest. The researcher must ensure the respondents understand the purpose of the research, the procedures used to collect data, be informed that no risk will come to the organization for releasing such information and no costs involved. The researcher must also get consent if the information is released to any other parties other than Kenyatta University. To ensure that the study is ethical and confidential, the researcher will ensure that the data collected is used purposively for academics.
CHAPTER FOUR
RESULTS AND FINDINGS

4.1 Introduction
This chapter presents the data analysis, findings and interpretation. Results are presented in tables and diagrams. The analyzed data was arranged under themes that reflected the research objectives.

4.2 Descriptive Statistics
Results in Table 4.1 present the descriptive statistics on capital allowance incentives, custom duty incentives, corporate income tax incentives, excise tax incentives and performance of the manufacturing firms as measured by their net profits.

Table 4.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Years</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital allowance incentives</td>
<td>2011-2016</td>
<td>540</td>
<td>2,233,229.00</td>
<td>8,404,637.00</td>
<td>0</td>
<td>75,700,000.00</td>
</tr>
<tr>
<td>Custom duty incentives</td>
<td>2011-2016</td>
<td>540</td>
<td>105,000,000.00</td>
<td>215,000,000.00</td>
<td>0</td>
<td>1,520,000,000.00</td>
</tr>
<tr>
<td>Corporate Income tax incentives</td>
<td>2011-2016</td>
<td>540</td>
<td>41,300,000.00</td>
<td>96,400,000.00</td>
<td>0</td>
<td>769,000,000.00</td>
</tr>
<tr>
<td>Excise tax Incentives</td>
<td>2011-2016</td>
<td>540</td>
<td>47,700,000.00</td>
<td>111,000,000.00</td>
<td>49,977.00</td>
<td>998,000,000.00</td>
</tr>
<tr>
<td>Profits</td>
<td>2011-2016</td>
<td>540</td>
<td>81,800,000.00</td>
<td>(882,000.00)</td>
<td>0.00</td>
<td>2,710,000,000.00</td>
</tr>
</tbody>
</table>

Source: Researcher (2018)

As shown in the table 4.1 above, the average capital allowances received by the firms for the period 2011 to 2016 were 2,233,229.00 with a standard deviation of 8,404,637.00 indicating a large variability in the capital allowance incentives received by the firms over the period. The maximum capital allowances received was 75,700,000.00 while the minimum was no incentives at all.
The results show that the average custom duty incentives that the firms had benefited from for the period 2011 to 2016 was 105,000,000.00 with a standard deviation of 215,000,000.00 which depicted a large variability in the amount received by the firms over the period. The maximum custom duty incentives received was 1,520,000,000.00 while the minimum was no incentives at all. On the other hand, the average amount of corporate income tax incentives received by the firms under study for the period 2011 to 2016 was 41,300,000.00 with a standard deviation of 96,400,000.00 where the maximum incentives received was 769,000,000.00 while the minimum was nil incentives. It was further found that the average excise tax incentives received by the firms for the period 2011 to 2016 was 47,700,000.00 with a standard deviation of 111,000,000.00 which represented a large variability in the excise tax incentives received. The minimum incentives received were 49,977.00 while the maximum was 998,000,000.00. Pertaining to the performance of the firms, the average net profits of the firms for the period 2011 to 2016 was 81,800,000.00 with a standard deviation of 322,000,000.00 where the highest net profits amounted to 2,710,000,000.00 while the minimum was (882,000,000.00).

4.3 Trend Analysis

This section presents the trend analysis of capital allowance incentives, custom duty incentives, corporate income tax incentives, excise tax incentives and performance of the manufacturing firms as measured by their net profits. The trend analysis is conducted so as to help establish the movement of the variables under study.
4.3.1 Capital Allowance Incentives

Figure 4.1 shows the capital allowance incentives trend for the 90 firms for the period 2011 to 2016.

![Capital Allowance Incentives Graph]

**Figure 4.1 Capital Allowance Incentives Trend**

**Source:** Researcher (2018)

The trend line in figure 4.1 above indicates that capital allowance incentives received have been on the decline. Trend lines shows that there is a low goodness of fit (R squared) for capital allowance incentives. The implication of this is that capital allowance incentives trend has been inconsistent. This is explained by the R squared. Lack of consistency indicates unsustainability.
4.3.2 Custom Duty Incentives

Figure 4.2 indicates the trend of custom duty incentives that the 90 firms had benefited from for the period 2011 to 2016.

![Custom Duty Incentives Trend](image)

**Figure 4.2 Custom Duty Incentives Trend**

**Source:** Researcher (2018)

The trend in figure 4.2 above indicates that the custom duty incentives received by the firms has been increasing. The trend line shows that there is a high goodness of fit (R squared) for custom duty incentives which is an indication of consistency and hence, sustainability of such incentives for the period 2011 to 2016.
4.3.3 Corporate Income Tax Incentives

Figure 4.3 presents the trend of corporate income tax incentives received by the firms for the period 2011 to 2016.

![Corporate Income Tax Incentives Trend](image)

**Figure 4.3 Corporate Income Tax Incentives Trend**

**Source:** Researcher (2018)

It is shown in figure 4.3 above that there was a slight decline in the incentives received in 2012 followed by a slight increase in 2013. The incentives received increased steadily in 2014 followed by slight increases in 2015 as well as 2016. The trend line depicts a high goodness of fit (R squared) for corporate income tax incentives which demonstrate that there has been sustainability in the corporate income tax incentives received by the firms.
4.3.4 Excise Tax Incentives

Figure 4.4 shows the trend for excise tax incentives of the 90 firms for the period 2011 to 2016.

**Figure 4.4 Excise Tax Incentives Trend**

**Source: Researcher (2018)**

The trend line in figure 4.4 above indicates that the excise tax incentives received by the firms under study have been increasing over the period 2011 to 2016. The trend line depicts a high goodness of fit (R squared) for excise tax incentives indicating that there has been sustainability in the excise tax incentives received by the firms.
4.3.5 Performance (Profitability) of the Firms

Figure 4.5 illustrates the performance trend of the 90 firms as measured by their net profits for the period 2011 to 2016.

![Net Profits over time graph]

**Figure 4.5 Performance of Manufacturing Trend**

**Source: Researcher (2018)**

The trend in figure 4.5 above indicates that the net profits for the firms had been increasing and there has been consistency in their performance. This can be associated with sustainability of some of the tax incentives granted to the firms in the study period.

4.4 Diagnostic Tests

4.4.1 Normality Tests

The most conclusive test of normality is the testing of the normality of the residuals. The residuals were obtained from running a regression model and afterwards predicting the residuals.

**Table 4.2: Normality Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pr(Skewness)</th>
<th>Pr(Kurtosis)</th>
<th>adj chi2(2)</th>
<th>Prob&gt;chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>residuals</td>
<td>0.0803</td>
<td>0.0033</td>
<td>10.38</td>
<td>0.0056</td>
</tr>
</tbody>
</table>

**Source: Researcher (2018)**
The null hypothesis in this case was that the variables were not significantly different from a normal distribution. Therefore, given a p value of less than 0.05, the null hypothesis was rejected and the study concluded that the variables under study were not from a normal distribution. Therefore, the conversion of data to natural logarithms instead of absolute values was undertaken in conducting the regression analyses.

### 4.4.2 Multi-collinearity

According to William et al. (2013), multi-collinearity refers to the presence of correlations between the predictor variables. In severe cases of perfect correlations between predictor variables, multi-collinearity can imply that a unique least squares solution to a regression analysis cannot be computed (Field, 2009). Multi-collinearity inflates the standard errors and confidence intervals leading to unstable estimates of the coefficients for individual predictors (Belsley et al., 1980). Multi-collinearity in the study was tested using Variance Inflation Factor (VIF) which was calculated using STATA. The rule of thumb is that a VIF for all the independent and dependent less than 3 (VIF ≤ 3) indicate no Multi-collinearity while a VIF of more than 10 (VIF ≥ 10) indicates a problem of Multi-collinearity.

**Table 4.3: Multi-collinearity Test using Variance Inflation Factor**

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excise tax incentives</td>
<td>2.42</td>
</tr>
<tr>
<td>Custom duty incentives</td>
<td>2.05</td>
</tr>
<tr>
<td>Capital allowance incentives</td>
<td>2.04</td>
</tr>
<tr>
<td>Corporate income tax incentives</td>
<td>1.31</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>1.96</strong></td>
</tr>
</tbody>
</table>

**Source:** Researcher (2018)

The results indicate that there was no multi-collinearity between the independent variables and the dependent variable. This was supported by the fact that the VIF for all the variables was less than 3 (VIF ≤ 3). The VIF for excise tax incentives, custom duty incentives, capital allowance incentives and corporate income tax incentives was 2.42, 2.05, 2.04 and 1.31 respectively and all these values were less than 3 as shown in Table 4.3 above.
4.4.3 Heteroscedasticity Test

Heteroscedasticity test was run in order to test whether the error terms are correlated across observation in the panel data.

Table 4.4: Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho: Constant variance</td>
</tr>
<tr>
<td>Variables: fitted values of Profits</td>
</tr>
<tr>
<td>chi2(1) = 916.50</td>
</tr>
<tr>
<td>Prob &gt; chi2 = 0.2279</td>
</tr>
</tbody>
</table>

**Source:** Researcher (2018)

The null hypothesis is that the data does not suffer from Heteroskedasticity since the p-value is greater than the 5%. The null hypothesis was not rejected at a critical p value of 0.05 since the reported value was 0.2279 as shown in table 4.4 above. Thus the data did not suffer from heteroscedasticity.

4.4.4 Test for Autocorrelation

The test for autocorrelation was done to determine whether residuals were correlated across time.

Table 4.5: Wooldridge test for Autocorrelation

<table>
<thead>
<tr>
<th>Wooldridge test for autocorrelation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0: no first-order autocorrelation</td>
</tr>
<tr>
<td>F(1, 89)=16.122</td>
</tr>
<tr>
<td>Prob&gt;F = 0.5838</td>
</tr>
</tbody>
</table>

**Source:** Researcher (2018)

The results presented in Table 4.5 indicated that the H₀ of no autocorrelation is not rejected and that residuals are not auto correlated (p-value=0.5838).
4.4.5 Hausman Test

In order to determine whether the fixed or random effects model is appropriate, the Hausman test was conducted. The Hausman test fundamentally tested whether the unique errors (ui) are correlated with the regressors.

**Table 4.6: Hausman Test Results**

<table>
<thead>
<tr>
<th>(b) fixed</th>
<th>(B) random</th>
<th>(b-B) Difference</th>
<th>Sqrt (diag (V_b-V_B)) S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital allowance incentives</td>
<td>3.746285</td>
<td>0.9874604</td>
<td>2.758825</td>
</tr>
<tr>
<td>Custom duty incentives</td>
<td>-0.1254389</td>
<td>-0.044477</td>
<td>-0.080961</td>
</tr>
<tr>
<td>Corporate income tax incentives</td>
<td>2.355168</td>
<td>2.609144</td>
<td>-0.253976</td>
</tr>
<tr>
<td>Excise tax incentives</td>
<td>0.8564866</td>
<td>-0.393246</td>
<td>1.249733</td>
</tr>
<tr>
<td>chi2(2)</td>
<td></td>
<td>10.47</td>
<td></td>
</tr>
<tr>
<td>Prob&gt;chi2</td>
<td></td>
<td><strong>0.0614</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source: Researcher (2018)**

The results of the Hausman test are as shown in Table 4.6. A resultant p value of 0.0614 was larger than the conventional p value of 0.05 leading to the acceptance of the null hypothesis that the unique errors (ui) are not correlated with the regressors and thus the random effects model is more appropriate.
4.5 Inferential Statistics

4.5.1 Correlation Analysis

Table 4.7 shows the results of the correlation analysis. The critical p value was set at 0.05.

Table 4.7: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Profits</th>
<th>capital allowance incentives</th>
<th>custom duty incentives</th>
<th>corporate income tax incentives</th>
<th>excise tax incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profits</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capital allowance</td>
<td>0.5689*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corporate income</td>
<td>0.6666*</td>
<td>0.5498*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>excise tax incentives</td>
<td>0.7674*</td>
<td>0.3822*</td>
<td>0.6210*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>excise tax incentives</td>
<td>0.6358*</td>
<td>0.4505*</td>
<td>0.6866*</td>
<td>0.5843*</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Researcher (2018)

The results revealed capital allowance incentives and performance of the manufacturing firms were positively and significantly associated (r=0.5689*). This implies that both capital allowance incentives and performance of the firms changed in the same direction. The results also revealed that custom duty incentives received and performance of the firms under study were positively and significant associated (r=0.6666*). This implies that both custom duty incentives received and performance change in the same direction. Similarly, it was found that corporate income tax incentives and performance are positively and significant associated (r=0.7674*). This implies that corporate income tax incentives and performance of the firms changed in the same direction. Finally, the results showed that excise tax incentives and performance of the firms were positively and significant associated (r=0.6358*). This suggested that both excise tax incentives and performance of the firms changed in the same direction.

4.5.2 Regression Analysis

In order to establish the effect of tax incentives on the performance of selected manufacturing, a regression model was run and the results are presented in Table 4.8. The results present the fitness of model used of the regression model in explaining the study phenomena. The
independent variables were found to be satisfactory in explaining performance of the firms (net profits). This is supported by coefficient of determination also known as the R square of 63.45%. This means that the independent variables namely capital allowance incentives, custom duty incentives, corporate income tax incentives and excise tax incentives explained 63.45% of the variations in the dependent variable which is performance of the selected manufacturing firms.

The results further imply that the model applied to link the relationship between the variables was satisfactory. In statistics, the Wald chi-square acts as an indicator of the goodness of fit of the overall model. Given that the p-value of the Wald chi-square was less than 0.05, taken together, the coefficients in the model were statistically significant. Hence, it was concluded that the model was significant in explaining the relationship between tax incentives and performance of the selected firms. The results are as presented in Table 4.8 where the Wald chi-square was 162.38 and the associated p value was 0.000.

**Table 4.8: Regression Coefficients**

| Profits                  | Coef.   | Std. Err. | z      | P>|z|   | [95% Conf. Interval] |
|--------------------------|---------|-----------|--------|-------|----------------------|
| capital allowance incentives | 0.149812 | 0.040282  | 3.72   | 0.000 | 0.070861 – 0.22876    |
| custom duty incentives   | 0.106236 | 0.065118  | 2.07   | 0.043 | 0.02739 – 0.23386     |
| corporate income tax incentives | 0.378722 | 0.05278  | 7.18   | 0.000 | 0.275276 – 0.48216    |
| excise tax incentives    | 0.204600 | 0.089025  | 2.30   | 0.022 | 0.030114 – 0.37908    |
| _cons                    | 4.174819 | 1.437922  | 2.90   | 0.004 | 1.356543 – 6.99309    |
| **R-squared**            | **0.6345**|
| Wald chi2(4)             | 162.38   |
| Prob(chi2>statistic)     | 0.000    |

**Source:** Researcher (2018)

**4.5.2.1 Corporate Income Tax Incentives and Performance**

Regression of coefficients results in Table 4.7 shows that capital allowance incentives and performance of selected manufacturing firms were positively and significantly related (beta=0.149812, p=0.000). An increase in the unit change in capital allowance incentives received would lead to an increase in the performance of the firms by 0.149812 units. The findings support that of Kuria (2016) who assessed the effect of capital allowance incentives on the performance of manufacturing firms in Kenya and found that capital allowances incentives
had positive effect on the performance of manufacturing firms in Kenya as measured by gross margins and number of jobs created. The findings are also in line with that of Agundu and Ohaka (2013) who examined the extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector and found that capital allowance were significantly associated with profit after tax, return on total assets and return on shareholders’ equity.

4.5.2.2 Custom duty incentives and Performance

The results also show that custom duty incentives and performance of selected manufacturing firms were positively and significantly related (beta=0.106236, p=0.043). This implies that, an increase in the unit change in custom duty incentives would lead to an increase in the performance of the firms by 0.106236 units. The findings support that of Amariati (2013) who sought to determine the financial factors that affected the profitability of manufacturing companies listed in the NSE in Kenya and found that high taxes levied led to high commodity prices. High taxes levied on imports and on inputs led to high production cost which further reduced the manufacturing firms’ profits. The findings however, differ from that of Rapuluchukwu, Belmondo, and Ibukun (2016) who investigated firms’ productivity using a case of Cameroonian firms and found that when considering import duty exemption, the significance of this variable was not consistent.

4.5.2.3 Corporate income tax incentives and Performance

The results further showed corporate income tax incentives and performance of selected manufacturing firms were positively and significantly related (beta=0.378722, p=0.000). An increase in the unit change in corporate income tax incentives would lead to an increase in the performance of the firms by 0.378722 units. The findings are in line with that of Gatsi, Gadzo and Kportorgbi (2013) who found that a significant negative relation between corporate income tax and financial performance of manufacturing firms in Ghana as well as the findings of Rohaya, Nor’Azem and Bardai (2010) who concluded that corporate income tax adversely affected the profitability of corporate institutions. This therefore meant that, any form of corporate income tax incentives would lead to an increase in the performance of firms in terms of productivity, profitability and also returns on investments.
4.5.2.4 Exercise tax incentives and Performance

It was also found that excise tax incentives and performance of selected manufacturing firms were positively and significantly related (beta=0.204600, p=0.022). An increase in the unit change in technology adoption would lead to an increase in access to banking services by Islamic customers by 0.204600 units. The findings are in agreement with that of a survey conducted by Regioplan Policy Research and EY (2014) in European Union countries and found that increases in excise duty rates impacted negatively on the economy since it had several consequences in relation to loss of sales, revenues and jobs. The findings also support that of Njuru et al. (2013) who found that excise tax impacted positively on private investment. These findings therefore imply that, any increases in tax incentives directed towards manufacturing firms in Kenya would lead to an increase in their performance.
CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the summary of the findings, conclusions and recommendations of the study based on the study findings as well as suggested areas for further research.

5.2 Summary of Findings
This section summarizes the findings obtained in chapter four in line with the study objectives.

The first objective of the study was to examine the influence of corporate income tax incentives on performance in selected manufacturing firms in Kenya. The trend analysis showed that such incentives to the firms had been sustainable over the study period. The correlation and regression analysis showed that corporate income tax incentives had the largest effect on the performance of these firms. The study findings revealed that corporate income tax incentives received by the firms had a positive and significant influence on the performance of these firms. This implied that any reduction in corporate income taxes or other initiatives such as tax holidays had a significant positive effect on the performance of the manufacturing firms in terms of productivity, profitability and also returns on investments. An improvement in this type of tax incentive leads to an improvement in both the profits of the firms, the number of people employed as well as the length of stay of these firms. This therefore suggests a need to review this tax incentive by the government and add more focus on it.

The study further sought to establish the influence of capital allowance incentives on performance in selected manufacturing firms in Kenya. The trend analysis showed that capital allowance incentives granted to these firms had been declining and were inconsistent over the study period which meant that such incentives were unsustainable. The study findings showed that the relationship between capital allowance incentives and the performance of these manufacturing firms was positive and significant. This meant that if the government would increase the incentives given to these firms, their performance would be affected favorably. Deliberate efforts should therefore be made by companies and investors operating in the manufacturing sector to focus on taking advantage of this tax incentive.
The study further explored the influence of custom duty incentives on performance in selected manufacturing firms in Kenya. The study findings showed that that the custom duty incentives received by the firms has been increasing and that they were sustainable over the study period. It was showed that such incentives had a positive and significant effect on the performance of the firms even though their effect on performance was the least.

The study also determined the influence of excise tax incentives on performance in selected manufacturing firms in Kenya. The findings showed that excise tax incentives received by the firms under study had been increasing over the study period. The effect of excise tax incentives on the performance of the firms was positive and significant.

5.3 Conclusions

The main purpose of this study was to assess tax incentives and their influence on performance in selected manufacturing firms in Kenya. Based on the study findings, the study concluded that corporate income tax incentives had a positive and significant effect on the performance of selected manufacturing firms in Kenya. The study also concluded that corporate income tax incentives had the largest effect on performance compared to other tax incentives. Similarly, the study concluded that capital allowance incentives and custom duty incentives affected the performance of selected manufacturing firms in Kenya positively. Excise tax incentives were also found to influence the performance of selected manufacturing firms in Kenya positively. Based on the study findings, it was concluded that tax incentives channeled by the government to the manufacturing firms in Kenya affected the performance of the manufacturing industry and could be used to enable expansion and survival of firms in these sector. The study also concluded that the various tax incentives needed to be made sustainable in order to ensure consistency in the performance of the firms.

5.4 Recommendations

Based on the study findings, it was recommended that the government needed to expand some of the tax incentives particularly capital allowances, excise tax incentives and custom duty incentives whose effect was yet to be fully felt within these firms compared to corporate income tax incentives. The study noted the need for greater diversification in the incentives granted and also greater sustainability. The study recommended the need for reducing the variability in the
amount of incentives among the firms so as to ensure the survival of a greater number of firms. The study also recommended the need for the government to conduct cost benefit analyses in order to ensure that the goals of granting such incentives are achieved.

The study further recommends that policy makers should adopt strategic incentive plans or targeted incentive scheme that targets specific industry or a strategic tax incentive that add value or contribute positively to the economy through expansion of various sectors and are in line with the country’s vision 2030. The design, implementation and administration of these strategic incentive plans will help avoid revenue loss, cutting down on imports and in that way promoting the growth of demand for domestic products in the country. Through this, the government will be able curb smuggling, entry of contraband goods and also to promote the growth of the tourism industry as Kenya will become an industrial hub in the region. In regards to corporate income tax incentives, the study recommends that the government ought to come up with a regulation on exit before the expiry of 10 years tax holiday so as that it doesn’t have to incur costs in providing incentives which did not have long term benefits to the selected sector and only favoured firms from outside the nation. For instance, a regulation can set out that if a firm left after 1 to 4 years of operation, the firm should not face a penalty however for those firms leaving after 5-9 years of operation in the country should pay a specified penalty on the incentives enjoyed during their operation in Kenya.

5.5 Recommendation for Further Research

The study recommends that a similar study can be replicated to other sectors other than the manufacturing sector so that the effects of such tax incentives can be compared across various sectors which might help in determining the best incentives for each industry.
REFERENCES


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Effiok, S. O., Tapang, A. T., & Eton, O. E. The Impact of Tax Policy and Incentives on Foreign Direct Investment (FDI) and Economic.


APPENDICES

Appendix I: Introduction Letter

Dear Respondent,

**RE: REQUEST FOR RESEARCH DATA**

I am a postgraduate student at Kenyatta University undertaking a research project on “Tax Incentives and Performance of Selected Manufacturing Firms in Kenya”. To achieve this, I kindly request to collect data related to your firms so as to generate data required for this study. This information will be used purely for academic purposes and your name will not be mentioned in the report. Findings of the study shall be availed to you upon request.

Your assistance and cooperation will be highly appreciated.

Yours Truly,

**Patrick Muthari Ngure**
Appendix II: Secondary Data Template

The following template has been developed to help the researcher gather information necessary to meet the research objectives.

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<th>Year/Tax Incentive</th>
<th>Corporate income tax Incentives</th>
<th>Capital Allowances Incentives</th>
<th>Custom Duty Incentives</th>
<th>Excise Tax Incentives</th>
<th>Net profits</th>
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<td>2016</td>
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</table>
REF: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Tax incentives and performance of selected manufacturing firms in Kenya” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 17th August, 2018.

You are advised to report to the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.
KENYATTA UNIVERSITY
GRADUATE SCHOOL
E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke
P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Dean, Graduate School
DATE: 27th June, 2017

TO: Patrick Muthari Ngure
C/o Accounting and Finance Dept.

REF: D53/OL/CTY/24066/2014

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting 21st June, 2017 approved your Research Project Proposal for the M.B.A Degree Entitled, “Tax Incentives and Performance of Selected Manufacturing firms in Kenya”.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

HARRIET ISABOKE
FOR DEAN, GRADUATE SCHOOL

e.c. Chairman, Accounting and Finance.

Supervisors:

1. Dr. Lucy Wamugo
C/o Department of Accounting and Finance,
Kenyatta University