EFFECTS OF EXCISE DUTY ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA: A CASE OF MANUFACTURING FIRMS IN KIAMBU COUNTY

BY

VIRGINIA WANJIKU MWANGI

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

SUMMER 2019
EFFECTS OF EXCISE DUTY ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA: A CASE OF MANUFACTURING FIRMS IN KIAMBU COUNTY

BY

VIRGINIA WANJIKU MWANGI

A Research Project Report Submitted to the Chandaria School of Business in Partial Fulfilment of the Requirements for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

SUMMER 2019
STUDENT DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University-Africa in Nairobi for academic credit.

Signed: ___________________________    Date: ________________

Virginia Wanjiku Mwangi 655250

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________    Date: ________________

Dr. Elizabeth Kalunda

Signed: ___________________________    Date: ________________

Dean, Chandaria School of Business
COPYRIGHT
All rights reserved. No part of this project may be reproduced or transmitted in any form or by any means, electronic or otherwise, without prior written permission from the author.
ABSTRACT

The general objective of the study was to establish the effects of excise duty on the financial performance of manufacturing firms in Kenya. The study was guided by the following specific objectives; to establish the effect of excise tax rates on the financial performance, to establish the effect of excise tax regulation on the financial performance, to establish the effect of pricing models of excisable goods on the financial performance of manufacturing firms in Kenya.

The research employed descriptive research design that helped in gathering information about the existing status of the phenomena. The study population comprised of representatives from the tax departments of the 39 manufacturing firms in Kiambu County. The study adopted the use of a census where the entire population formed the sample of the study. Therefore, the sample size were representatives from each of the tax departments from the 39 manufacturing firms. The study used primary data as the method to collect data with a structured questionnaire. The research questionnaire was divided into four sections and will use a Likert Scale. The data was coded based on the Likert Scale and analyzed to test the level of significance of each variable. The study used descriptive statistics such as the percentages, mean and standard deviation to present the findings. The data was analyzed using a multiple regression model with the use of SPSS version 24 statistical analysis tool. The data from the study findings was represented in the form of tables and figures as this enhanced easier interpretation and understanding of the research findings.

The result of the study showed that there was positive significant relationship between excise tax regulation and financial performance. The findings found out that coefficient of determination showed that the changes of financial performance of manufacturing firms is caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. The study found out that by holding excise tax regulation and pricing models constant a unit change in excise tax rates will lead to a significant increase in profitability. Furthermore, the results also indicated that holding excise tax rates and pricing models constant a unit change in excise tax regulation will lead to increase in profitability and lastly holding excise tax rate and excise tax regulation constant a unit change in pricing models results to an increase in financial performance.
The study concludes that continuous transfer of excise tax rates on consumer service decreases firm profitability. Inadequate information on tax burden transferability decreases profitability of manufacturing firms. The employees indicated that increased imposition of excise duty on luxurious products decreases the profitability and that regular issuing of excise tax incentives results to an increase in the profitability of firms. Favorable excise regulation planning environment improves profitability of firms and that redundant aggressive excise tax planning strategies by manufacturing firms increase profitability. The employees also agreed that imposition of high excise tax on large manufacturing firms positively affects profitability. Over shifting of excise taxes determines the pricing models of the various products and as excise tax keeps on changing, this also impacts the price of the products thus has a significant impact on financial performance.

The study recommends that the Kenya Revenue Authority should strive to ensure that the imposition of excise tax does not affect the financial performance manufacturing firms. Government should continuously review excise tax regulation in order to enhance financial performance of manufacturing firms and the level of investment both local and foreign direct investment which will invariably reduce poverty and unemployment rates in the country. Further studies can be looked into the effects of excise duty on the profitability of the service sectors in the economy e.g. banking sector so that a clear comparison to be generalized. This will allow the revenue authority to have a clear guideline on the excise duty.
ACKNOWLEDGEMENT

Firstly, I would wish to thank the almighty God for the gift of life, His guidance, strength and wisdom and the ability to successfully complete this project. I also appreciate my loving family for their unending support both materially and morally throughout the project. I also acknowledge the contribution of my colleagues and constructive critique on my supervisor Dr. Kalunda who guided me through the entire project.
DEDICATION

I dedicate this project to my family for their support, love and encouragement throughout my studies.
# TABLE OF CONTENTS

STUDENT DECLARATION ........................................................................................................ ii  
COPYRIGHT ........................................................................................................................... iii  
ABSTRACT ............................................................................................................................... iv  
ACKNOWLEDGEMENT ........................................................................................................... vi  
DEDICATION ........................................................................................................................ vii  
TABLE OF CONTENTS .......................................................................................................... viii  
LIST OF TABLES .................................................................................................................. xi  
LIST OF FIGURES ............................................................................................................... xii  
LIST OF ABBREVIATIONS AND ACRONYMS ..................................................................... xiii  

## CHAPTER ONE ............................................................................................................... 1  
1.0 INTRODUCTION ......................................................................................................... 1  
1.1 Background of the Study ............................................................................................. 1  
1.2 Statement of the Problem ............................................................................................ 4  
1.3 General Objective ....................................................................................................... 6  
1.4 Specific Objectives ....................................................................................................... 7  
1.5 Significance of the Study ............................................................................................ 7  
1.6 Scope of the Study ....................................................................................................... 8  
1.7 Definition of Terms ..................................................................................................... 8  
1.8 Chapter Summary ....................................................................................................... 10  

## CHAPTER TWO ............................................................................................................... 11  
2.0 LITERATURE REVIEW .............................................................................................. 11  
2.1 Introduction ................................................................................................................. 11  
2.2 Effects of Excise Tax Rates on Financial Performance .................................................. 11  
2.3 Effects of Excise Tax Regulation on Financial Performance ......................................... 15  
2.4 Effects of Pricing Models of Excisable Goods on Financial Performance ..................... 19
CHAPTER THREE ................................................................. 24
3.0 RESEARCH METHODOLOGY ............................................. 24
  3.1 Introduction ......................................................................... 24
  3.2 Research Design .................................................................. 24
  3.3 Population and Sampling Design .......................................... 25
  3.4 Data Collection Methods .................................................... 26
  3.5 Research Procedure .......................................................... 27
  3.6 Data Analysis Methods ....................................................... 28
  3.7 Chapter Summary .............................................................. 29

CHAPTER FOUR ....................................................................... 30
4.0 RESULTS AND FINDINGS ..................................................... 30
  4.1 Introduction ......................................................................... 30
  4.2 General Information .......................................................... 30
  4.3 Descriptive Analysis of the Findings ..................................... 33
  4.4 Effects of Excise Tax Regulation on Financial Performance ........... 36
  4.5 Effects of Pricing Models of Excisable Goods on Financial Performance ...... 39
  4.6 Inferential Statistics ............................................................ 43
  4.7 Chapter Summary .............................................................. 46

CHAPTER FIVE ......................................................................... 47
5.0 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS .......... 47
  5.1 Introduction ......................................................................... 47
  5.2 Summary ........................................................................... 47
  5.3 Discussion .......................................................................... 48
5.4 Conclusions .................................................................................................................. 53
5.5 Recommendations ...................................................................................................... 54

REFERENCES .................................................................................................................. 56

APPENDICES .................................................................................................................. 65

APPENDIX ONE: INTRODUCTION LETTER ................................................................. 65
APPENDIX TWO: RESEARCH QUESTIONNAIRE ......................................................... 66
APPENDIX THREE: NACOSTI PERMIT ......................................................................... 72
LIST OF TABLES

Table 4.1: Effects of Transferability of Tax Rate Burden on Financial Performance ...... 34
Table 4.2: Effects of Excise Rate Tax Structure on Financial Performance .................. 35
Table 4.3: Effects of Excise Tax Rate Incentives on Financial Performance ................. 36
Table 4.4: Effects of Excise Regulation Planning on Financial Performance ............... 37
Table 4.5: Effects of Excise Tax Regulation Regimes on Financial Performance ........... 38
Table 4.6: Effects of Excise Tax Regulation Systems on Financial Performance ........... 39
Table 4.7: Economic Pricing Model of Excisable Goods and Financial Performance ...... 40
Table 4.8: Effects of Supply and Demand Pricing of Excisable Goods on Financial Performance ........................................................................................................................................................................... 41
Table 4.9: Effects of Over Shifting Excise Duty Pricing on Financial Performance ........... 42
Table 4.10: Profitability of Manufacturing Firms ............................................................ 43
Table 4.11: Multiple Correlation Analysis ...................................................................... 44
Table 4.12: Model Summary .......................................................................................... 44
Table 4.13: ANOVA, Analysis of Variance .................................................................... 45
Table 4.14: Regression Coefficients .............................................................................. 45
LIST OF FIGURES

Figure 4.1: Response Rate ........................................................................................................30
Figure 4.2: Gender of Respondents .........................................................................................31
Figure 4.3: Age of Respondents ..............................................................................................31
Figure 4.4: Education Level .....................................................................................................32
Figure 4.5: Work Experience ...................................................................................................33
# LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance (ANOVA)</td>
</tr>
<tr>
<td>BAT</td>
<td>British American Tobacco</td>
</tr>
<tr>
<td>EABL</td>
<td>East African Breweries Limited</td>
</tr>
<tr>
<td>EPZs</td>
<td>Export Processing Zone</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GLS</td>
<td>Generalized Least Square</td>
</tr>
<tr>
<td>FMOLS</td>
<td>Fully Modified Least Square</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi Securities Exchange</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>SEM</td>
<td>Structural Equation Modeling</td>
</tr>
</tbody>
</table>
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

According to Harris and Livingstone (2012), tax is an involuntary fee that is levied on corporate organizations and individuals and is enforced by a government entity to finance government activities. The imposition of tax by the government is one of the ways that government can finance its expenditure which includes public debt, printing of currency, sale of assets, and drawing down of cash reserve with the central bank. Moreover, tax is a cheaper source of finance for government expenditure compared to the alternative sources. Hence, taxation has become a popular source of government expenditure financing. Salami, Apelogun, Omidiya and Ojoye (2015) highlighted that a tax system is an effective means of mobilizing a nation’s internal resources in addition to lending internal resources in a bid to create a conducive environment for the promotion of economic growth.

According to Pomaskow (2016), an excise tax is identified as a levy applied selectively on goods and services. Such levies are applied for a variety of reasons, the main one being their ability to raise substantial revenue for government at relatively low administrative or compliance costs. Excise taxes are mainly levied at relatively high rates on a few commodities, which are produced by a few large producers. Additionally, the main characteristic of such commodities is that they tend to have a low own-price elasticity of demand. This implies that there is minimum shifting of consumer purchases when prices change, and thus very high tax rates can be applied. This coupled with strict administrative controls by tax authorities normally results in substantial tax revenue.

Excise taxation constitutes an important part of fiscal policy which can be engaged effectively by different countries government and developing economies. According to Mashiri and Sebele-Mpofu (2015) most of the developing countries rely on excise taxes for their economic growth and generating wealth. In Kenya excise taxes have continued to play an important role in raising additional government revenue. Excise taxes have always been useful whenever government wants to raise additional revenue to contain the level of its budget deficit. Furthermore, most of the recent upward adjustments to tax rates outside the usual annual government budget have been on excisable products.
According to Preece (2013), the effectiveness of excise duty on various food and beverage products deemed luxuries or harmful to health and how they affect the financial performance of companies involved has been debated regularly in recent years. Andrejs, Valters, and Roberts (2017) established the impact of changes in excise tax on the financial performance of alcoholic beverage manufacturing firms in Latvia. They revealed that changes in excise taxes does impact negatively on the financial performance of alcoholic beverage manufacturing firms in Latvia. According to Caitlan and Walbeek (2016), imposition and over shifting of excise duty on the manufacturing sector has both positive and negative implications to the manufacturing firms.

According to Scholes, Wolfson, Erickson, Maydew and Shevlin (2009), theoretically, firm’s tax liability is proportionally related to its profitability; attaining firm’s wealth maximization objective through diverse means of increasing profitability poses more challenge on firm’s ability to reduce its tax liability. With a general reduction in import tariffs, governments are placing increasing importance on excise taxation as a means of generating a reliable stream of sustainable income. Further, excise duty is playing a greater role in broader government policies as a form of taxation which can be used to influence consumption of certain products, generally on health or environmental protection grounds. Thus, the effective collection of excise duties is becoming a high national priority in many countries.

Ogundajo and Onakoya (2016) established the influence of excise tax planning on the financial performance of manufacturing firms quoted on Nigerian Stock Exchange using annual reports and accounts of 10 selected firms out of 28 firms listed under consumer goods sector. They established that aggressive excise tax planning such as thin capitalization and tax law incentives have not been fully utilized by the Nigerian firms. They further recommended that manufacturing firms in Nigeria should make excise tax planning as part of the firm’s strategic financial planning and to effectively utilize all-inclusive tax planning strategies available in order to further influence financial performance positively.

According to Mawia and Nzomoi (2013), objectives of excise tax rates on manufacturing firms are to raise revenue for general purposes, reflect external costs associated with consumption or production but not accounted for in price, discourage consumption that is deemed undesirable, charge road users for government-provided services, and increase the
progressivity of the tax systems specifically for luxury goods. Similarly, Okech and Mburu (2011) indicates that there are a wide range of rationales for excise tax rates. Excise tax rates are used as a means of implementing an ability to pay approach to taxation. Moreover, excise tax rate may be levied as a technique for negative externalities, relating with sumptuary excises such as imposing excise tax on automobiles to reduce the divergence of the private and social costs, relating to pollution and congestion which is widely evident in European countries.

According to Hamilton (2009), pricing models of excisable goods have also been critically analyzed when formulating excise tax policy and rates. Excise taxes reduce price equilibrium output and decrease equilibrium product variety in the short run, but taxes can raise output per product in the long run and induce entry. Haughton (2013) highlight that excise taxes are over shifted into prices in a wide range of cases, including under linear and concave demand conditions, and excise taxes shift less than one-for-one into prices only when demand is highly convex. Multiproduct transactions substantively alter the efficiency of ad valorem and specific forms of excise taxes and affect the comparison of relative tax performance over short-run and long-run time horizons.

According to Saravana and Manivasagan (2015) financial performance is a subjective measure of a firm’s overall financial health over a given period and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Other measures of financial performance include liquidity, solvency, profitability, debt repayment capacity and financial efficiency of the firm. Financial performance involves a subjective measure of how a firm effectively utilizes its assets from principal role of conducting business and constant generation of revenues (O’Neill, Sohal, & Teng, 2016). Financial performance is an important mechanism which helps in ascertaining the strengths and weakness in the operation and financial position of a company. Ganag, Kalaiselvan and Suriya (2015) found that some macroeconomic variables and financial ratios significantly influenced financial performance.

Muriithi and Moyi (2015) indicate that excise taxes in Kenya are imposed under the Customs and Excise Act (Chapter 472). The administration of excise taxes, therefore, is the responsibility of the Customs and Excise Department of the Kenya Revenue Authority. Kenya’s main excisable commodities include soft drinks, alcoholic beverages, tobacco, fuel and motor vehicles. Other excisable commodities are plastic bags and importation of
second-hand computers. Excisable services mainly include mobile telephone services and gambling. Other than on motor vehicles, excise taxes on beer, cigarettes and petroleum are currently charged on a specific basis, i.e., per volume or quantity. Characteristic of these commodities is that they have a low own-price elasticity of demand implying that their responsiveness to price change is low and hence minimum shifting of consumer purchases. It is these characteristics that make high excise tax rates applicable.

According to Gatsi, Gadzo and Kportorgbi (2013), the manufacturing sector of any economy is very important as its contribution to the growth of the economy reflects visibly in job creation and improved tax contribution. Manufacturing is the corner stone of Kenya's Industrial sector. According to the Kenya National Bureau of Statistics Economic Report (2017) the manufacturing sector is not only seen as the economy's engine of growth but also as a means of diversifying it. The Kenyan manufacturing sector has achieved considerable success since independence, although there has been relatively slow growth in the 1980s.

Manufacturing companies constitutes approximately more than 70% of the industrial sector contribution to the Gross Domestic Product (GDP). They are the main pillar and key drivers of the vision 2030 in the realization of sustainable economic development in gearing Kenya to middle income country. The main category of the manufacturing sector ranges from building, construction, mining, Agri processing and chemicals. Goods and services produced by manufacturing firms have been subject to excise taxes and this has led to a mixed of performances in the market with some companies raking in profits despite higher taxes.

1.2 Statement of the Problem

According to Debnath (2016) high taxation has been identified as one of the major potential threat to the growth and development of manufacturing firms in developed and developing nations. Sinnsamy, Bidin and Ismail (2015) argue that firms dealing with specific types of goods that attract excise duty are not only liable to high taxation but also their goods are limited to specific caliber of consumers in the society. The literature study taxation of corporate profits begun decades ago and has grown especially in recent years. Furthermore, researchers and academicians have agreed that excise tax has an impact on firms that are subject to excise tax. However, these results and findings have been inconclusive and not
able to highlight the degree to which the imposition and implementation of excise tax on manufacturing firms is not clear. Moreover, they have only been specific to excise duty as opposed to highlighting the specific components of excise duty such as excise duty rate, excise duty regulation and pricing models of excisable goods and how they affect financial performance.

A study conducted by Andreea (2016) to establish the effects of excise taxation on the financial performance of companies. The study used data for 25 companies listed on the Bucharest Stock Exchange between 2006 and 2011. This study found a negative correlation between the effective excise tax rate, interest rate and performance, and a positive correlation between leverage, firm size, relative growth of the company and financial performances. Beigi, Rafat and Panah (2013) conducted a study to analyze the effects of excise tax on the profitability indices of companies listed in the Tehran Stock Exchange. The approach applied in this research was descriptive-analytic. Using the data of 28 companies listed in Tehran Stock Exchange from 2004 to 2010 and using panel data approach, the excise tax effects over the paid profitability indices were studied. The results achieved from all estimation cases pointed out a negative significant effects of excise tax on various profitability indices of companies listed in the Tehran Stock Exchange.

Anand and Singh (2018) conducted a study to determine the impact of the pricing models of excisable goods on the financial performance of manufacturing firms in India. Four hypotheses were formulated for the study and tested using t-statistic. The study relied on secondary data extracted from the audited financial statement of the selected companies. The study findings concluded that there exists a negative relationship between pricing models and financial performance of manufacturing firms in India. The study also indicated that most firms transfer the costs incurred on excise tax to the consumer with the aim of sharing the taxation burden while remaining profitable.

Linegar and Walbeek (2018) conducted a study to establish the effects of excise tax rates increase on the price of cigarette in South Africa. Data on the excise tax rate per cigarette were obtained from Budget Reviews prepared by the National Treasury of South Africa. The study concluded that excise tax rates increases, causes increase in the prices of cigarette thus also has an impact on the producing firms. In a study conducted by Munyoro, Chinze and Dzapasi (2016) aimed at establishing the effects of excise duty rate on the profitability and growth of small manufacturing firms in Zimbabwe. To achieve this, a qualitative
research methodology centered on the positivist philosophy was adopted. The research design involved a case study approach where data was obtained through self-administered questionnaire. The study findings indicate that excise tax rates have a negative impact on the financial performance of small manufacturing firms in Zimbabwe.

Chesire (2018) conducted a study to establish effects of excise tax on the profitability of cigarette and alcohol manufacturing firms listed in the Nairobi Securities Exchange. These companies were only BAT and EABL. The study used secondary data obtained from the companies’ financial statement and NSE handbook. The study adopted a descriptive research design. Data was collected and analyzed using multiple regression where excise tax was the independent variable and net profit and liquidity as the control variables. The results of the correlation showed a negative correlation between excise tax and profitability. This meant that excise taxes led to a decrease in the profitability of the firms under the study. Namiba (2016) conducted a study to establish the effects of excise tax regulation on the financial performance of oil firms in Kenya. The study covered 10 years from 2006 to 2015 and secondary data for four oil firms in Kenya. The study findings revealed that the introduction of excise tax regulation has had a negative effect on the financial performance of oil firms in Kenya.

The relationship between excise duty and financial performance remains unclear for the various specific manufacturing firms and it is still not conclusive enough on whether excise duty affects financial performance. There remains a gap to be filled on whether excise duty on manufacturing firms affects their performance or not. Additionally, despite the existence of such studies, very little focus has been on developing countries such as Kenya. As a result, there is a major research gap as to the extent and how excise duty affects financial performance of manufacturing firms which must be conducted in a research. This research aimed at drawing findings related to the gap by studying the effects of excise duty on the financial performance of manufacturing firms in Kenya.

1.3 General Objective

The general objective of the study was to establish the effects of excise duty on the financial performance of manufacturing firms in Kenya.
**1.4 Specific Objectives**

This study was guided by the following specific objectives;

1.4.1 To establish the effect of excise tax rates on the financial performance of manufacturing firms in Kenya.

1.4.2 To establish the effect of excise tax regulation on the financial performance of manufacturing firms in Kenya.

1.4.3 To establish the effect of pricing models of excisable goods on the financial performance of manufacturing firms in Kenya.

**1.5 Significance of the Study**

**1.5.1 Manufacturing Firms**

The study will be of great importance to manufacturing firms that manufacture various products in Kenya. From the study findings, the firms will be able to specifically identify which aspects of excise tax rates, excise tax regulations and pricing models affect their performance. From the study findings, manufacturing firms will also be able to come up with favorable excise duty planning policies that will ensure that they meet the regulatory requirement on payment of excise duty and at the same time remain profitable.

**1.5.2 The Government**

The study will also be of significant to the government. The government through the legislative arm; Parliament, oversees enacting laws related to excise duty on various manufacturing products. Through the study findings, the government will be able to enact and implement excise duty regulations that generate revenues for implementation of government projects and expenditure while also ensuring that manufacturing firms in Kenya remain profitable. This will be of great importance to the Kenyan economy.

**1.5.3 Kenya Revenue Authority**

The Kenya Revenue Authority (KRA) oversees implementation of all tax related laws and collection of government taxes in Kenya. The study findings will be of benefit to KRA as it will provide a basic framework and recommendation through which it will be able to effectively and efficiently collect excise duty from manufacturing firms in Kenya without interfering with their profitability and growth prospect.
1.5.4 Researchers and Academicians

Researchers and academicians will also find the study of great significance. From the study findings, researchers and academicians will be able to get recommendations on areas of further studies related to excise duty and financial performance. Researchers and academicians will also be able to use the study as a point of reference on any other academic document or publication related to excise duty and how it affects financial performance.

1.6 Scope of the Study

The study majorly involved determining the effects of excise duty on financial performance of manufacturing firms in Kenya. The study specifically targeted manufacturing firms in Kiambu County. There are approximately more than 70 manufacturing firms in Kiambu County and manufacture various products. The study data was primary, and this was collected using a questionnaire as the primary source of data collection tool administered to employees in the finance department within the manufacturing firms. The study was conducted over a period of six months from January 2019 to June 2019.

1.7 Definition of Terms

1.7.1 Excise Duty

According to the Excise Duty Act of 2015, excise duty is defined as a levy that is applied selectively on goods and services (Muriithi & Moyi, 2016).

1.7.2 Excise Tax Rate

According to the Kenya Revenue Authority (2019), excise tax rate is defined as the proportion assigned to the taxation of specific goods or services manufactured in a county.

1.7.3 Excise Tax Regulation

According to Excise Duty Act of 2015, excise tax regulation is defined as the guidelines/policies that outline the excisable goods, the excise tax rates and procedures to be followed when collecting excise tax in Kenya (Muriithi & Moyi, 2016).
1.7.4 Taxation

Taxation is defined as compulsory levies on private individuals and organizations made by government to raise revenue to finance expenses on public goods and services and to control the volume private expenditure in the economy (Nechaev, 2014).

1.7.5 Pricing Model

According to Chamberlain (2013) pricing model is defined as the method that a firm or a company adopts in the setting of prices for products and services in accordance to both internal and external factors.

1.7.6 Financial Performance

Financial performance is defined as a measure of how well a company/firms uses assets from its primary mode of business and generate revenues and profit (Naz, Ijaz, & Naqzi, 2016).

1.7.7 Manufacturing Firm

According to Ibraimi (2014), manufacturing firms is defined as a production unit located in a certain area that is engaged in activities to transform a product mechanically or chemically into a product/goods which can used by the final user.

1.7.8 Ad Valorem Tax

Ad valorem tax is defined as the charge levied as a percentage of the value of the commodity or property imposed on as opposed the commodity’s quantity, size or weight (Nazarov, 2016).

1.7.9 Tax Rate Incentives

According to Trepelkov and Verdi (2018) tax rate incentives is defined as government measures that are aimed to encourage firms and individuals to encourage spending and savings through the reduction of taxes.
1.7.10 Tax Aggressiveness

According to Hanlon and Heitzman (2010) tax aggressiveness is defined as a broad range of activities to outright tax fraud and tax evasion.

1.7.11 Tax Regulation System

According to Nazarov (2016) tax system is defined as an interconnected community of all existing public relations and legislation to include economic, political, organizational, and legal in the field of taxation.

1.7.12 Tax Rate Regime

Tax rate regime is defined as legislation, regulation or administrative practice that provides a preferential effective rate of taxation in a specific country (Clyone, 2013).

1.8 Chapter Summary

Chapter one introduced study background that presents excise duty and financial performance of manufacturing firms. The chapter also discussed the statement of the problem, general objective and the specific objectives of the study that guided the study. The significance and scope of study were described in this chapter. Chapter two looked at the literature review based on the specific objectives identified in chapter one, while chapter three will discuss the research methodology that was adopted by the study. Chapter four discussed the study findings and make finding presentation. Chapter five summarized the findings, discuss the findings, and gave conclusion to the study and recommendations of the study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter entailed the literature review of the study with the aim of establishing the effects of excise duty on the financial performance of manufacturing firms in Kenya. The literature review was based on the specific objectives which are to establish the effect of excise tax rates on the financial performance of manufacturing firms in Kenya; to establish the effect of excise tax regulation on the financial performance of manufacturing firms in Kenya and to establish the effect of pricing models of excisable goods on the financial performance of manufacturing firms in Kenya.

2.2 Effects of Excise Tax Rates on Financial Performance

2.2.1 Effects of Transferability of Tax Rate Burden on Financial Performance

According to Rob (2016), with the consistent decline in import tariffs, governments have turned the importance on excise taxation as a means of generating a reliable stream of sustainable income. Excise tax rates are playing a greater role in broader government policies as a form of taxation which can be used to influence consumption of certain products. However, it is not clear to what extent does excise tax rates affect financial performance. Excise taxes rates are classified by the Organization for Economic Co-operation and Development (OECD) as taxes which are imposed on specific products, or on a limited range of products and imposed at any stage of production or distribution and are usually assessed by reference to the weight or strength or quantity of the product.

Excise tax rate burden influence the rate of capital accumulation. By changing the return on capital, they might discourage saving and investment by economic agents such as manufacturing firms; hence excise taxes alter the intertemporal allocation of resources. Lower levels of investment eventually lower the capital stock which in turn impacts on financial performance. According to Seber and Arslan (2012) in traditional microeconomic analysis, the excise tax rate is considered as a burden to be avoided, and therefore companies are assumed to transfer all the tax payment to the consumers. As a result, this would mean an upward shift of the supply function by the amount of the excise tax,
resulting in an increase in the equilibrium price of the good as well as a decrease in equilibrium quantity traded.

According to Klassen, Lisowsky and Mescall (2014), the optimal excise tax transfer problem becomes a game of imperfect information between manufacturing firms and the revenue authorities. They further highlight that revenue authorities would like to impose excise tax to profitable manufacturing firms and give tax transfers to the less profitable manufacturing firms. However, the revenue authorities strive to ensure that the imposition of excise tax does not negatively affect the financial performance of profitable manufacturing firms which is not always the case. However, with revenue authorities imposing excise tax on specific manufacturing firms, this results in the transfer of the excise tax burden to consumers who incur additional costs when purchasing the products or services.

According to Organization for Economic Co-operation and Development (OECD) has identified the opportunities that manufacturing firms have to greatly reduce their tax burden and this results to a significant harm on governments as they will experience decline in excise tax revenues as a result individual taxpayers have to cover the shortfall in corporate taxes and this greatly affects the financial capacity to make purchases. Bing, Lili, Yan and Mohib (2018) conducted a study to establish the effects of excise tax burden transfer on the financial performance of low scale manufacturing firms. The study introduced the risk allocation of tax burden to measure the tax burden outlier. Using a time-varying nonparametric benchmark and path model, this paper measured the tax risk allocation of 3552 small and micro enterprises in the credit insurance fund from January 2016 to August 2018. The study findings indicated that transferability of excise tax burden affects financial performance.

A study conducted by Nadeem, Muhammad and Suliman (2015) aimed at establishing the effects of excise tax burden on financial performance of listed companies in Malaysia. This study was conducted to find the relationship between excise tax burden and financial performance of listed companies in Malaysia for years 2000-2015 using time series data. Statistical techniques used in analysis include Regression analysis, Unit root test, co-integration test, white test, and so other tests for reliability of the study. The study concluded that excise tax burden positively affects financial performance of listed companies in Malaysia.
2.2.2 Effects of Excise Rate Tax Structure on Financial Performance

Excise rates tax structure have serious effect on the solvency, profitability, and other indicators of performance of manufacturing companies. According to Mika, Mbwanbo and Tripathi (2012), they argue that if the excise tax rate structure is not adequately designed to the specific environmental conditions, it may create a greater burden to the tax-paying organizations and eventually affecting the final consumer due to the shifter ability of tax. A study conducted by Seber and Arslan (2012) aimed at establishing the strategic behavior of firms and excise tax rate payments and how it affects profitability. The study analyzed the effect on price and quantity traded of a commodity of an excise tax payment under different conditions. Based on the results of the regression analysis, the study findings established that excise tax rates affect financial performance. This in turn is transferred to consumers as part of raising the tax required by government authorities.

Atawodi and Ojeka (2012) examined the effects of excise tax rates structure on the financial performance of manufacturing firms in Nigeria. The study aimed at identifying the effect that excise tax rates would have on the performance of manufacturing firms. A total of 100 structured questionnaires were distributed to the staff of the selected manufacturing firms in Nigeria. The hypothesis was tested using the regression analysis. The results of the empirical review showed that excise tax rate structure negatively affects the funds available for investment in the manufacturing industries. The study concluded that excise tax rates negatively affects financial performance of manufacturing firms in Nigeria. The study however recommended that there should be more awareness among manufacturing firms in Nigeria on the tax incentive available to them. They should be encouraged to take advantage of tax incentives in order to enhance their financial performance.

According to Wanjala (2006), the equity objective under excise taxes rates structures has mainly been pursued through use of high and largely differentiated rates on goods that are considered luxurious and considered harmful to human consumption. A study conducted by Owino (2019) aimed at establishing the effects of excise and custom duty tax rates structures on the economic growth of Kenya. The study was motivated by the inconsistency in existing empirics and secondly by the wide knowledge gap occasioned by the paucity of empirical literature on Kenya. The study adopted a correlation research design based on its ability determine the strength and direction of relationships between variables while the theoretical framework was anchored on endogenous growth model. The empirical results
indicate that custom and excise duties rates structures are positively correlated with economic growth in Kenya. Furthermore, the study concluded that excise tax rates structure significantly affects the financial performance of manufacturing firms in Kenya, which is key to economic growth.

2.2.2 Effects of Excise Tax Rate Incentives on Financial Performance

Organization for Economic Co-operation and Development (OECD) tax policy study and Schwarz (2012) defines tax incentives as provision in the tax code or other codes that offer a preferential tax treatment to certain activities over time, for example manufacturing versus non-manufacturing industries, some organizational forms of business over others. Easson and Zolit (2003) define tax incentives as those special exclusions, exemptions, or deductions that provide special credits, preferential tax rates or deferral of tax liability. They argue that tax incentives can take the form of tax holidays for a limited duration, current deductibility for certain types of expenditures, or reduced import tariffs or customs or excise duties. According to Armstrong, Blouin and Larcker (2012) excise tax rates incentives not only generate employment but also motivates the self-employed to incorporate into limited liability companies. This leads to improved profitability of the firms.

Using panel data in his study, Wan (2010) examined whether excise tax rates incentives improved the financial performance of firms. The fixed effects panel regression was established, and the results revealed that excise tax rate incentive did play a significant effect on improving performance of the investigated firms. Safdar, Yasir, Ammara and Abdul (2014) conducted a study to establish the effects of government imposition of excise tax regulation on the financial performance of manufacturing firms in Pakistan. In order to investigate the impact, secondary data were collected from financial reports (2005 to 2010) of companies regarding textile sector. Economic Survey of Pakistan (1996 to 2010) issued by FBR were also applied. Two different models were applied to make final analysis. The results revealed that excise tax rate incentive has positive impact on the financial performance of manufacturing firms in Pakistan.

According to Alina and Florian (2015), excise tax rate incentives are costly especially to the government. Excise tax rate incentives presents the government with the difficulty of ensuring that they are effective. This is because they require a complex administrative task,
so that would be more effective than the purpose of covering costs of their implementation and to produce net benefits. In addition, companies in the manufacturing sector are more sensitive to excise tax rates incentives because of their ability to exploit them and enhance their profitability. Hedia, Amira, Jameleddine and Jaleleddine (2011) conducted a study to establish the effects of excise tax incentive on the financial performance of mechanical and electrical companies in Tunisia. The study sampled 60 mechanical and electrical companies in Tunisia. Primary data was used in the study and a multiple regression model used to come up with the study conclusions. The study established that regular excise tax rates incentives positively affects the financial performance of mechanical and electrical companies in Tunisia.

Kuria (2016) conducted a study to establish the effects of tax incentives on the financial performance of export processing zones (EPZ) in Kenya. The study included also examined the effect of excise tax rates incentive on the financial performance of EPZs in Kenya. The performance of EPZ firms was measured by profitability, gross margins and the number of jobs EPZ firms created. The study adopted a descriptive and explanatory research design. The study used a stratified sampling approach because the number of the EPZ firms in Kenya was categorized into 4 strata. The total numbers of firms used in the study were 86 registered EPZ firms in Kenya. Primary data was obtained using questionnaires. Secondary data from the registered firms was collected on; ROA, number and value of jobs created and the length of stay of the firms. The study findings indicated that excise tax rate incentives positively affected the financial performance of EPZs in Kenya.

### 2.3 Effects of Excise Tax Regulation on Financial Performance

#### 2.3.1 Effects of Excise Regulation Planning on Financial Performance

According to Desislava and Nikolay (2012), the purpose of an efficiently designed excise tax regulation is to achieve desired fiscal policy objectives (allocation, redistribution, and stabilization) in the most efficient way, namely by limiting undesired distortions, minimizing the cost of excise tax collection and promoting economic growth. The efficiency of excise taxation and particularly the excise tax structure plays important role in achieving economic growth and fiscal consolidation. Edame and Okoi (2014) argue that apart from the objective of raising the public revenue, excise tax regulation level affect
consumption, production and distribution with a view to ensuring the social welfare through the economic development of a country. In addition, excise tax regimes also allow for the allocation of available resources, raising government revenue, encouraging savings and investment, acceleration of economic growth, price stability and control mechanism.

Excise tax regulation and funds raised from excise taxes has become a main of revenue in most of the developed and developing countries (Borrego, Lopes, & Ferreira, 2013). However, excise tax regulation non-compliance remains a serious issue around the world. Bidin and Perabavathi (2018), conducted a study to determine the level of excise duty regulation planning in Malaysia. Using the deterrence theory as the basis of this study’s framework, data were collected from 500 useable excise duty offenders scattered throughout Malaysia. Results from regression analysis (partial least square) indicated that penalty rate, the probability of detection and tax knowledge revealed a positive and significant relationship with excise duty compliance.

Massell, Pearson and Fitch (2012) note that excise tax regulation planning is an ongoing process with excise tax policy makers and administrators continually adopting the tax systems to reflect changing economic, social and political circumstances in the economy. A study conducted by Adegbite and Owolabi (2017) aimed at establishing the effects of excise tax regulation planning and investment of manufacturing companies in West Africa. The study employed the method of Johansen co-integration and the Granger causality tests using data spanning the period 1981-2013. The study findings indicated that excise tax regulation planning has a negative impact both in the short run and long run on profitability and investment of manufacturing firms in West Africa. The study recommended that the government should continuously review excise tax regulation in order to enhance financial performance and the level of investment both local and foreign direct investment which will invariably reduce poverty and unemployment rates.

A study conducted by Izuchukwu and Chude (2015) aimed at establishing the impact of both income tax and excise tax regulation planning on the financial performance of Breweries Firms in Nigeria. The study used secondary sources of data and a time series econometric technique with an error correction model tested the variables most likely to impact on profitability of companies in Nigeria. The study revealed that the level of excise tax regulation has significant effect on the profitability, which drew the conclusion that excise tax regulation has significant effect on profitability. The study concluded that the
positive and significant relation between the profitability and the excise tax regulation indicates that policy measures to expand tax revenue through more effective excise tax administration will impact positively on growing the company’s profitability. The study recommended that governments should expand the excise tax yield through improved tax system regulation and administration.

Ogundajo and Onakoya (2016) conducted a study to establish the impact of excise tax regulation planning on the financial performance of manufacturing firms. Using annual reports and accounts of 10 selected firms out of 28 firms listed under consumer goods sector. The study employed Generalized Least Square (GLS) method of regression based on the outcome of Hausman’s model estimation test. The study established that aggressive tax planning such as thin capitalization, tax law incentives and other benefits of loopholes in tax laws have not been fully utilize by manufacturing firms. The study recommended that manufacturing firms should make excise tax planning as part of the firm’s strategic financial planning in order to further influence financial performance positively.

2.3.2 Effects of Excise Tax Regulation Regimes on Financial Performance

Critics on excise tax regulation of manufacturing firms indicate that large manufacturing firms engage in excise tax planning activities. A study by Seyram and Kportorgbi (2014) aimed at establishing the effects of excise tax regulation planning on the firm performance. The study used 22 non-financial companies listed on the Ghana Stock Exchange over a twelve-year period from 2000. The longitudinal correlative designed was used. The results indicate that that firms’ tendency to engage in intensive excise tax regulation planning activities reduces when tax authorities maintain low corporate income tax rates. In addition, the study findings indicated that excise tax regulation planning has a neutral influence on firms’ performance. The finding challenges the general perception that every amount of tax savings from tax planning reflect in the firm financial performance. It is concluded that firms must institute systems to ensure excise tax planning benefits reflect significantly in terms of how they perform financially.

Mosota (2014) conducted a study with the aim of establishing the effects of excise tax regulation and excise tax evasion on the financial performance of listed firms in the Nairobi Securities Exchange. The study collected secondary data and was descriptive in nature. The data comprised of the size, institutional shareholding government shareholding, age, and intangible assets of the firms. The results show that excise tax regulation and excise tax
avoidance positively impact on the financial performance of the selected companies listed in the NSE. The study highlighted that though excise tax avoidance has positive impact on the financial performance of the companies, it is not always in the best interest of both the companies and the statutory authority. Companies which fail to remit tax face the risk of tax penalty and even receivership.

Many taxes are motivated by non-fiscal considerations. According to Lesley and Muehlegger (2015), while a great number of studies estimate short- and long-term excise tax elasticities, fewer examine how excise tax regimes affect consumers and how they specifically adapt their behavior to excise tax changes. This has a bearing on the financial performance of the specific firms. Furthermore, Colchero, Salgado, Unar-Munguia, Molina and Rivera-Dommarco (2015) argue that although the excise tax elasticity of demand is useful for fiscal considerations, it provides an incomplete picture of whether the observed consumer response represents an actual reduction in consumption of the taxed good or whether it represents some form of consumer tax avoidance.

A study conducted by Zhang, Cheong and Rajah (2016), aimed to determine how different excise tax regimes affects profitability of listed firms in China. The results using structural equation modeling (SEM) show that there is a significant negative direct relationship between excise tax regime and financial performance. It indicates that the opaque nature of China’s stock market creates ‘opportunities’ for managers using tax avoidance as an instrument to engage in value addition activities which hurt shareholders’ value and affect financial performance of listed manufacturing companies. The study concluded that changes in excise tax regimes can be a value-adding activity but for firms to appropriate its advantages, there is a need to strengthen internal supervision and management capability.

### 2.3.3 Effects of Excise Tax Regulation Systems on Financial Performance

According to Ali-Nakyea (2008), a good excise tax regulation system should exhibit both horizontal and vertical equity. Vertical equity is achieved if firms with higher income pay higher excise tax (higher effective tax rate) than firms with lower income. Gatsi, Gadzo and Kportorgbi (2013), conducted a study to establish the effects of changes in excise tax regulation systems 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 changes in excise tax regulation systems on financial performance. The study revealed that there is a significant negative relation
between changes in excise tax regulation systems 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.

Olaoye, Ogunleye and Solanke (2018) conducted a study to establish the effects of excise tax regulation systems on financial performance. The study made use of both primary and secondary data. Primary data used in the study were collected with the use of questionnaires administered to 350 randomly selected staffs of Lagos state Internal Revenue Services, while secondary data used in the study were sourced from Federal Inland Revenue Service and Lagos Internal Revenue Service audit division in Lagos state over the period spanning from 2000 to 2015. Data collated in the study were analyzed descriptively using inferential methods such as unit root test, and estimation techniques such as Fully Modified Least Square (FMOLS) co-integration regression and Logit regression analysis. The study concluded that excise tax regulation systems has a significant impact on financial performance.

Karianya (2013) conducted a study to establish the effects of taxation on economic growth with emphasis on the financial performance of various economic sectors in Kenya. One of the objectives was to establish how excise rate systems affects financial performance. Using the Ordinary Least Square (OLS) method, the study estimated the long-run cointegrating equation. Pre-estimation tests were carried out to determine homoscedasticity, serial autocorrelation, multicollinearity and normality of the variables. The results revealed overall significance of the explanatory variables in explaining GDP. The study findings revealed that excise tax regulation systems affects financial performance and the economy.

2.4 Effects of Pricing Models of Excisable Goods on Financial Performance

2.4.1 Effects of Economic Pricing Model of Excisable Goods on Financial Performance

According to Vatuiu, Tarca, Udrica and Popeanga (2010), indicate that the growing trend of trade liberalization policies with other countries such as free trade areas needs to be considered as import duty rates gradually disappear and therefore no longer provide a source of government revenue. This means that pricing models of excisable goods is becoming increasingly important. There are three things that determine the economic pricing models of excisable goods and this include the excise burden, the excise system,
and the structure of excise rates. Economists maintain that increasing excise rates is considered an effective means of reducing consumption. According to Chaloupka, Hu, Warner, Jacobs and Yürekli (2000), increasing the excise rate by 10 per cent of the retail price would reduce consumption of certain products by 4 per cent in high income countries and 8 per cent in low- and middle-income countries.

The economic excise system has also had an impact on consumption, government revenue and price (Chaloupka, Peck, Yürekli, Taurus & Xu 2010). According to Alexeev and Conrad (2009) there are three excise regimes which are specific, *ad valorem* and hybrid. Specific excise is levied on the amount of goods produced or consumed as the amount per pack, stick or gram of tobacco. *Ad valorem* excise is based on a percentage of the product value (price) or processing costs or the price of imports, while hybrid excise entails both specific and *ad valorem* excise tax regimes. The tariff structure determines the effectiveness of the tariff rate and excise system adopted. Variable excise rates can cause prices to rise or fall.

Hidayat and Nasruddin (2015) conducted a study to establish the impact of economic pricing models on cigarette consumption and financial performance of cigarette manufacturing firms in Indonesia. Several estimation models using unbalanced and sub-balanced panel data, random effect maximum likelihood estimation (MLE) and panel-corrected standard errors (PCSE) were explored to estimate the impact. The results indicated that pricing models of cigarettes as an excisable good in Indonesia has a greater impact on raising cigarette prices, reducing consumption, and increasing government revenue than regularly increased excise rates. This however has a negative impact on firm performance. The results also suggest that cigarette excise taxes are under-shifted to consumers and that producers bear some of the excise tax burden.

**2.4.2 Effects of Supply and Demand Pricing of Excisable Goods on Financial Performance**

According to Cnossen (2014), the supply and demand pricing models adopted on certain excisable goods have an impact on the perceived product quality which in turn either affects the financial performance of the company either positively or negatively. In addition, most excises have probably been enacted for revenue purposes with the main consideration being that they could be administered more easily than other taxes. Excise duties on tobacco,
alcohol, petrol, and motor vehicles are good potential sources of revenue because the products are easy to identify, the volume of sales is high, and the fact that there are few producers. Furthermore, Wasserman, Manning, Newhouse and Winkler (2011) argued that excise tax of manufactured products can be either specific taxes or *ad valorem*. Many countries impose specific rates on certain excisable goods and *ad valorem* rates on other excisable goods, particularly for goods varying widely in quality which is in turn transferred to the pricing models adopted by firms and impact on their financial performance indicators.

The imposition of excise tax may be approached differently by firms. According to Surjono (2018) increases in tax rates can be borne entirely by the firms so that they do not cause price increases and are more likely to occur when any tax increase is significant but the demand for the product is elastic and they risk losing market share. This directly impacts the firm financial performance. However, where a product is relatively price inelastic and consumers are less impacted by price increases, the firm pass the new tax burden on to consumers. The excise tax burden can also be transferred in total or in part to the consumer in the form of price increases. In addition, increases in the product or service price exceeds the increase in excise rates. Decoster, Loughrey, O’Donoghue and Verwerft (2010) indicate that high excise tax rate increases are assumed to cause high increases in price and ultimately affect the consumer’s decision to reduce the consumption of excisable products and this affects financial performance.

According to Hamilton (2009) pricing models of excisable goods for most firms in the manufacturing sector is one of the most important subjects in financial and economic scope regarding development and importance of market role. In addition, the pricing model adopted by such firms is among the most important criteria of financial performance measurement. Priya and Nimalathasan (2013) conducted a study to establish the determinants of pricing models adopted by listed manufacturing firms on excisable goods and how it affected their performance in Sri Lanka. The study analyzed the pricing models adopted and financial performance during 2006 to 2010 financial year of listed manufacturing companies in Sri Lanka. For this study, the data was extracted from the annual reports of sample companies. Correlation and multiple regression analysis were used for analysis. The study findings established that pricing models on excisable goods had a great impact of both return on investment and return on assets.
2.4.3 Effects of Over Shifting Excise Duty Pricing on Financial Performance

While many factors affect the final price of excisable goods, the most important policy-related determinants of pricing models are excise taxes on specific goods from manufacturing firms (Cheung, 2016). Excisable goods provide significant revenue to governments with relatively low administrative costs making such excisable goods appealing, especially during periods of budget shortfalls. A study conducted by Chaloupka, Peck, Tauras, Xu and Yurekli (2010), aimed to determine how the pricing models on excisable products such as cigarettes affected financial performance. The study composed cross-sectional time-series data for 21 EU countries from year 1998 to 2007 from various data resources. The study findings indicated that that the price gap between premium and low-priced brands is larger in countries with a greater share of ad valorem tax. A 10-percent raise in the share of ad valorem tax in total excise tax leads to about a 4 to 5 percent increase in the price gap, with a smaller impact in more concentrated markets. This significantly had an impact on financial performance of manufacturing firms.

According to Caitlan and Walbeek (2016), imposition and over shifting of excise duty on the manufacturing sector has both positive and negative implications to the manufacturing firms. They further conducted a study to establish the effects of changes in pricing models of alcoholic beverages on the financial performance of firms in South Africa. The study was descriptive in nature. The study findings revealed that most of the price change in response to excise tax change occurs immediately, and prices are fully adjusted two months after the excise tax increase becomes effective. The study concluded that the over shifting of the excise tax has positive implications on pricing models which have a significant relationship on the financial performance of alcohol manufacturing firms in South Africa.

Conlon and Rao (2016) argue that within a pricing model with full competition, excise taxes are fully passed on to prices leading to a one for one change in after excise tax prices. The effects of a change in the excise tax on the after-tax price is less clear under imperfect competition. Excise taxes may in this case be under shifted or over shifted depending on the elasticity of the demand function, the relative slopes of the marginal cost and inverse demand functions as well as on the number of firms. Bergman and Hansen (2017) conducted a study to establish whether excise taxes of specific manufactured products are passed on to prices and how this affects financial performance. The study findings indicated that over shifting of excise taxes determine the pricing models of the various products and
as excise tax keeps on changing, this also impacts the price of the products thus a significant impact on financial performance. The study recommended the need for firms that produce excisable goods should efficiently and effectively consider their pricing models.

Haughton (2013) highlight that excise taxes are over shifted into prices in a wide range of cases, including under linear and concave demand conditions, and excise taxes shift less than one-for-one into prices only when demand is highly convex. Mailu and Mulinge (2016) conducted a study to establish the effects of pricing models of excisable products on the financial performance of sorghum processing firms in Kenya. Using ARIMA time series modelling, the study analyzed the imposition of two tax changes, a reduction of tax in 2006 and an increase of tax in 2013, on the demand for agricultural products in Kenya. Data represented by results show a relatively large change in demand occasioned by excise tax increases. The study concluded that pricing models on excisable goods affects the financial performance of sorghum processing firms in Kenya.

2.5 Chapter Summary

The chapter discussed the literature review in detail. The literature review was based on the study objectives and previous studies done in the same areas have been highlighted in the chapter with the specific methodology and findings that guided the researcher. The next chapter highlighted the research methodology. This entailed describing the research design, the population and sampling design. The methods of data collection were also explained in the study. The chapter concluded by highlighting the research procedures and methods of data analysis to facilitate the reporting of study findings and study recommendations.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter contained the research design, target population, sample size and sample selection. It also captured data collection instruments together with the questionnaire validity and reliability. Moreover, the chapter presented the data collection procedures and methods of data analysis. According to Cooper and Schindler (2011), research methodology comprises of defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions.

3.2 Research Design

Bougie and Sekeran (2013) defines research design as the scheme, outline or plan that is used to generate answers to a research problem. It as the master plan specifying the methods and procedures for collecting and analyzing the needed information. Furthermore, research design is the researcher`s plan for achieving research objectives. It is a blue print for conducting the research. According to McBurney and Theresa (2010) there are four main types of research design which include exploratory research design, explanatory research design, correlational research design and descriptive research design. The main emphasis in a correlational research design is to discover or establish the existence of a relationship between two or more aspects of a situation. Explanatory research design attempts to clarify why and how there is a relationship between two aspects of a situation or phenomenon.

The research employed descriptive research design that helps in gathering information about the existing status of the phenomena. This method was used because it addresses the objective of the study in investigating the relationship between excise duty and financial performance of manufacturing firms in Kenya. According to Mugenda and Mugenda (2003) descriptive design considers aspects like sample size in relation to the target population, dependent and independent variables under the study, research approaches and data collection methods.
3.3 Population and Sampling Design

3.3.1 Study Population

McMillan and Schumacher (2013) basically defined population as the universe of units from which the sample is to be selected. Population can also be defined as the entire group of people, events, or things of interest that the researcher wishes to investigate. The population of the study comprised of employees in the manufacturing firms in Kiambu County. According to Kenya National Bureau of Statistics (2018), there are currently 39 manufacturing firms in Kiambu County that manufacture excisable goods. The study population specifically comprised of representatives/employees from the tax departments of the 39 manufacturing firms in Kiambu County. The study population comprised of employees in the tax departments of the 39 manufacturing firms.

3.3.2 Sampling Design

According to Etikan, Musa and Alkassim (2016), sample design refers to the plans and methods to be followed in selecting sample from the target population and the estimation technique formula for computing the sample statistics. These statistics are the estimates used to infer the population parameters. The basic purpose of sampling is to provide an estimate of the population parameter.

3.3.2.1 Sampling Frame

Sampling frame is defined as the physical representation of all the objects or elements in a population study from which the sample is drawn (Hussey & Collins, 2009). In this study, the sampling frame constituted employees in the tax departments of the manufacturing firms in Kiambu County. The sample frame was obtained from the Kenya National Bureau of Statistics Annual Economic Report on the manufacturing sector.

3.3.2.2 Sampling Technique

McBurney and Theresa (2010) indicate that the sampling method techniques outlines the way in which the sample units are to be selected. The choice of the sampling technique is influenced by the objectives of the research, availability of financial resources, time constraints, and the nature of the problem to be investigated. Churchil and Iabonucci (2005)
indicate that there are two main types of sampling techniques which are probability sampling and non-probability sampling. Non-probability sampling is any sampling method where some elements of the population have no chance of selection. These techniques include convenience sampling, quota sampling, purposive sampling and snowball sampling.

According to Cooper and Schindler (2011) probability sampling involves where the sample is taken in such a manner that each unit of the population has an equal and positive chance of being selected. Probability sampling include simple random sampling, systematic random sampling, stratified random sample and cluster sampling. Since the study population is small, the study adopted the use of a census where the entire population will form the sample of the study. According to Churchill and Iacobucci (2005) a census is a survey conducted on the full set of observation objects belonging to a given population or universe. The study adopted the use of census because census gives data in detail for small populations which other sample techniques fail to provide.

3.3.2.3 Sample Size

Cooper and Schindler (2011) defines a sample as a subset of the population and adds that it comprises some members selected from the population, i.e. some of the elements of the population form the sample. Sample size is also defined as a segment of the population selected for investigation. Due to the study being a census, the study population formed the sample of the study. Since information that was obtained from the respondents was similar in nature, the sample size comprised one representative each of the tax departments from the 39 manufacturing firms in Kiambu County.

3.4 Data Collection Methods

Data collection plays a very crucial role in the statistical analysis. In research, there are different methods used to gather information, all of which fall into two categories primary and secondary data (Mugenda & Mugenda, 2003). Primary data is one which is collected for the first time by the researcher while secondary data is the data already collected or produced by others.
The study used primary data as the method to collect data. The primary data collection instrument that was used in this study was a structured questionnaire. Primary data was received firsthand from questionnaires where the researcher will collect the data using drop and pick approaches. The research questionnaire was divided into four sections and will use a Likert Scale. A Likert scale questionnaire is a set of questions that seeks to find out information about variables. The scale was indicated with 1-5 with 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5- strongly disagree. The questionnaire as attached in the appendix contained the section for background information; where the gender, age, educational level and duration of working in the manufacturing firm was determined, the section on the effects of excise tax rates on financial performance, the section on the effects of excise tax regulation on financial performance and the section on the effects of pricing models of excisable goods on financial performance

3.5 Research Procedure

Permission from the project supervisor and USIU-Africa Research office was sought and consent from the employees of the manufacturing firms was requested through a formal introduction letter. Due to the nature of the data collection, the researcher administered the questionnaires personally to the respondents. Before proceeding to the field for data collection, the researcher verified the proposal and questionnaire with the project supervisor. The researcher also conducted a pilot test with five representatives from the 39 manufacturing firms in Kiambu County. This was helpful in ensuring that the intended purpose of the study is achieved. On average, it was estimated that the respondents took about 10-15 minutes to complete the questionnaires. The pilot study demonstrated that the study questionnaire was feasible. There was considerable discrepancy in the answers to some of the questions resulting in participants not understanding the questions properly. As such the researcher simplified the questions that were identified not to be clear during the pilot test. The researcher also classified the questions to each objective to facilitate ease of understanding by the respondents. Furthermore, the researcher also rephrased the questions that were identified as been biased and vague as most of them were not properly responded to by the respondents. However, it was also important to check the validity and reliability of the questionnaires. The researcher tested for validity of the questionnaires before data
collection. Some questions could cause problems and questionnaire testing will be necessary to identify and eliminate these problems.

To effectively distribute the questionnaires to the respondents, the researcher employed a drop and pick approach with the help of a research assistant. The manufacturing firms involved in the study were 39 distributed across various sub counties in Kiambu as such the need to seek the help of a research assistant. This was done for a period of one week. Further to distributing the questionnaire, the researcher personally made phone calls to the respective tax departments of the manufacturing firms and also sent emails to the respondents. This was necessary to ensure there was a high response rate.

3.6 Data Analysis Methods

According to Etikan et al. (2016), data analysis is the process of reviewing, cleaning, converting and displaying data with the main purpose of reporting useful information and suggesting conclusions and recommendations. This entails generation of descriptive statistics after data collection, estimation of population parameters from the statistics, and making of inferences based on the statistical findings. Once the data was collected, it was coded based on the Likert Scale and analyzed to test the level of significance of each variable. The study used a multiple linear regression to establish the relationship between excise tax rates, excise tax regulation, pricing models of excisable goods and the financial performance of manufacturing firms in Kenya. This was performed using the multiple regression model equation as shown below:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]

Where:
Y= Financial Performance (this will be analyzed based on the profitability of the manufacturing firms)
\( \alpha \) is a constant,
\( \beta_1 X_1 \) is the coefficient of excise tax rates
\( \beta_2 X_2 \) is the coefficient of excise tax regulation
\( \beta_3 X_3 \) is the coefficient of pricing models of excisable goods
\( e \) is the margin of error
The data was analyzed using a multiple regression model with the use of SPSS version 24 statistical analysis tool. Inferential statistics was used to test the significance of the relationship between excise tax and financial performance. This included the use of Analysis of Variance (ANOVA) that was used to test the level of significance of the model at 95% level of significance. Coefficient of determination (R²) was used to show the percentage for which the excise tax rate, excise tax regulation and pricing models of excisable goods explain the change in financial performance. The data from the study findings was represented in the form of tables and graphs as this enhanced easier interpretation and understanding of the research findings.

3.7 Chapter Summary

The researcher outlined and explained the research methodology that the study adopted. This included identifying the study’s research design, the population and methods that was used to collect data. The chapter also highlighted and described the research procedure and the methods that was used in the analysis of the collected data. Chapter four presented the findings of the data. This was done in the form of tables and charts for easier interpretation by the researcher and future researchers. The findings were based on the questionnaires that was distributed by the researcher.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the research findings, data analysis and interpretation. The findings are presented on the effects of excise duty on the financial performance of manufacturing firms in Kiambu County. The chapter first presents the general information of the respondents, and both descriptive and inferential statistics have been used to represent the data and to show significant differences and the links between excise duty and financial performance of manufacturing firms in Kiambu County.

4.2 General Information

The study established the general information of the respondents which were as follows; gender, age, number of years worked, and highest level of education attained in the organization. The findings are indicated in subsequent sections.

4.2.1 Response Rate

The study distributed 39 questionnaires to the employees of manufacturing firms, 34 questionnaires were dully filled and returned to the researcher. This gave a response rate of 87%, which Mugenda and Mugenda (2003) states that a sample size of 70% and above is deemed statistically enough for a study.

![Response Rate](image-url)

Figure 4.1: Response Rate
4.2.2 Gender of Respondents

The distribution of respondents’ gender is indicated in the Figure 4.2 shows that the majority of the respondent 56% (19) in the manufacturing firms were male, 44% (15) were female. This presents that both genders were equitably represented in this study.

**Figure 4.2: Gender of Respondents**

4.2.3 Age of Respondents

The researcher requested the respondents to indicate their age. The findings are as shown in Figure 4.3. The findings show that 55% (19) of the respondents were aged 26-35 years, 29% (10) were aged between 36-45 years, 9% (3) were aged between 46-55 years and 6% (2) were aged above 56 years. The findings show that majority of the respondents were aged between 26 to 35 years, an indication that the respondents were able to fill the questionnaire.

**Figure 4.3: Age of Respondents**

4.2.5 Education Level

---

31
This study sought to establish the highest level of education of those who participated in the study. The findings are indicated in the Figure 4.4. Majority of the respondents 67% (23) highest level of education was master’s degree, 27% (9) had undergraduate degree and 6% (2) had diploma certificate. This indicates that the respondents would interpret the questionnaires and reliable data was provided by the respondents.

![Educational Level](image)

**Figure 4.4: Education Level**

**4.2.4 Work Experience**

The researcher sought to investigate the number of years employees have been working in different manufacturing firms. The findings are as shown in Figure 4.5. The findings show that majority of the respondents 32% had worked for 7 to 10 years, 26% had worked for 4 to 6 year, 23% had worked for 11 to 13 years, between 0 to 3 years were represented by 9%, 7% had worked for 14 to 16 years and above 16 years represented by 3%. The findings show that majority of the respondents had worked between 7 to 10 years an indication that they were more skilled and understood how organization operated; therefore, they were more knowledgeable on the excise duty and financial performance of manufacturing firms.
4.3 Descriptive Analysis of the Findings

The study sought to establish the effects of excise tax rates on financial performance. The scale was as from 1-5 where 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-strongly disagree. A mean close to 5 shows that the respondents agreed with the variable while a mean close to 1 means that the respondents disagreed with the variable.

4.3.1 Effects of Transferability of Tax Rate Burden on Financial Performance

The study sought to understand the effects of transferability of tax rate burden on financial performance. The employees agreed that capital accumulation due to excise tax transferability results to decline in firm profitability where this was indicated by a mean of 3.794 and standard deviation of 1.175. They also indicated that continuous transfer of excise tax rates on consumer service decreases firm profitability in which this was shown by a mean of 3.265 and standard deviation of 1.355. Inadequate information on tax burden transferability decreases profitability of manufacturing firms where a mean of 2.971 and standard deviation of 1.732 indicating they were in disagreement with the statement. They further disagreed that uncertainty due to transfer of excise tax burden to consumers results to decline profitability of manufacturing firms by a mean of 2.647 and standard deviation of 0.981. The aggregate mean was 3.169 and a standard deviation of 1.311 indicating that the employees of the manufacturing firms indicated that transferability of tax rate burden influences financial performance. The findings on the effects of transferability of tax rate burden on financial performance is as shown in Table 4.1.
Table 4.1: Effects of Transferability of Tax Rate Burden on Financial Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital accumulation due to excise tax transferability results to decline in firm profitability.</td>
<td>34</td>
<td>3.794</td>
<td>1.175</td>
</tr>
<tr>
<td>Continuous transfer of excise tax rates on consumer product/service decreases firm profitability.</td>
<td>34</td>
<td>3.265</td>
<td>1.355</td>
</tr>
<tr>
<td>Inadequate information on tax burden transferability decreases profitability of manufacturing firms.</td>
<td>34</td>
<td>2.971</td>
<td>1.732</td>
</tr>
<tr>
<td>Uncertainty due to transfer of excise tax burden to consumers results to decline profitability of manufacturing firms.</td>
<td>34</td>
<td>2.647</td>
<td>0.981</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.169</td>
<td>1.311</td>
</tr>
</tbody>
</table>

4.3.2 Effects of Excise Rate Tax Structure on Financial Performance

The employees of the manufacturing firms indicated that increased imposition of excise duty on luxurious products decreases the profitability of manufacturing firms. This was shown by a mean of 3.324 and standard deviation of 1.342. They also agreed that disparity in the structuring of excise tax rates on manufactured products decreases the profitability of manufacturing firms where this was indicated with a mean of 3.559 and standard deviation of 1.106. There is also an increase on imposition of excise duty on products classified as harmful for consumption which decreases the profitability of manufacturing firms where this was shown by mean of 3.618 and standard deviation of 0.985. Respondents further agreed that poor government framework on excise rate structure decreases the overall profitability of manufacturing firms where this was indicated by a mean of 3.353 and standard deviation of 1.390. The study sought to understand the effects of excise rate tax structure on financial performance. The overall mean of excise rate tax structure was 3.463 and a standard deviation of 1.206 indicating that the respondents agreed that excise rate tax structure has an effect towards financial performance of manufacturing firms. The findings on the effects of excise rate tax structure on financial performance is as shown in Table 4.2.
4.3.3 Effects of Excise Tax Rate Incentives on Financial Performance

The study sought to understand the effects of excise tax rate incentive on financial performance. The employees disagreed that regular issuing of excise tax incentives results to a decline in the profitability of manufacturing firms in this was indicated by a mean of 2.718 and standard deviation of 1.066. They agreed that shorter implementation duration of excise tax incentives decreases profitability of manufacturing firms and a mean of 3.618 and standard deviation of 1.206 was reported. Employees further agreed that increased costs of excise tax incentives by government decreases the profitability of manufacturing firms by a mean of 3.177 and standard deviation of 1.267 while limited availability of information on excise tax incentives by manufacturing firms decreases firm profitability by a mean of 2.559 and standard deviation of 1.460. The overall mean of excise rate tax structure was 3.018 and a standard deviation of 1.250 indicating that the respondents agreed that excise tax rate incentive has an effect towards financial performance of manufacturing firms. The summary of the finding on the excise tax rate incentive and financial performance is indicated in Table 4.3.

Table 4.2: Effects of Excise Rate Tax Structure on Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased imposition of excise duty on luxurious products decreases the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.324</td>
<td>1.342</td>
</tr>
<tr>
<td>Disparity in the structuring of excise tax rates on manufactured products decreases the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.559</td>
<td>1.106</td>
</tr>
<tr>
<td>Increased imposition of excise duty on products classified as harmful for consumption decreases the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.618</td>
<td>0.985</td>
</tr>
<tr>
<td>Poor government framework of excise rate structure decreases the overall profitability of manufacturing firms.</td>
<td>34</td>
<td>3.353</td>
<td>1.390</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.463</td>
<td>1.206</td>
</tr>
</tbody>
</table>
Table 4.3: Effects of Excise Tax Rate Incentives on Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular issuing of excise tax incentives results to a decline in the profitability of manufacturing firms.</td>
<td>34</td>
<td>2.718</td>
<td>1.066</td>
</tr>
<tr>
<td>Shorter implementation duration of excise tax incentives decreases profitability of manufacturing firms.</td>
<td>34</td>
<td>3.618</td>
<td>1.206</td>
</tr>
<tr>
<td>Increased costs of excise tax incentives by government decreases the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.177</td>
<td>1.267</td>
</tr>
<tr>
<td>Limited availability of information on excise tax incentives by manufacturing firms decreases firm profitability.</td>
<td>34</td>
<td>2.559</td>
<td>1.460</td>
</tr>
<tr>
<td>Average</td>
<td>34</td>
<td>3.018</td>
<td>1.250</td>
</tr>
</tbody>
</table>

4.4 Effects of Excise Tax Regulation on Financial Performance

The study sought to establish the effect of excise tax regulation on financial performance. The scale was as from 1-5 where 1-strongly disagree, 2- disagree, 3- neutral, 4-agree and 5- strongly disagree. From the findings, a mean close to 5 shows that the respondents agreed with the variable while a mean close to 1 means that the respondents were in disagreement with the variable.

4.4.1 Effects of Excise Regulation Planning on Financial Performance

The study sought to understand the effects of excise regulation planning on financial performance. The employees disagreed that non-compliance of excise tax regulation increases the profitability of manufacturing firms with a mean of 1.971 and a standard deviation of 1.11. Respondents agreed that foreseeable excise rate regulation patterns increase profitability of manufacturing firms in which a mean of 3.824 and a standard deviation of 0.999 was reported. Employees strongly agreed that favorable excise regulation planning environment improves profitability of firms in which a mean of 4.324 and a standard deviation of 0.727 was reported and indicated that redundant aggressive excise tax planning strategies by manufacturing firms increases profitability where this was represented by a mean of 3.177 and a standard deviation of 1.359. The overall mean of excise regulation planning structure was 3.324 and a standard deviation of 1.050 indicating that the respondents agreed that excise regulation planning affect financial performance of
manufacturing firms. The summary of the finding on the excise regulation planning and financial performance is indicated in Table 4.4.

Table 4.4: Effects of Excise Regulation Planning on Financial Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance of excise tax regulation increases the profitability of manufacturing firms.</td>
<td>34</td>
<td>1.971</td>
<td>1.114</td>
</tr>
<tr>
<td>Foreseeable excise rate regulation patterns increase profitability of manufacturing firms.</td>
<td>34</td>
<td>3.824</td>
<td>0.999</td>
</tr>
<tr>
<td>Favorable excise regulation planning environment improves profitability of manufacturing firms.</td>
<td>34</td>
<td>4.324</td>
<td>0.727</td>
</tr>
<tr>
<td>Redundant aggressive excise tax planning strategies by manufacturing firms increases profitability.</td>
<td>34</td>
<td>3.177</td>
<td>1.359</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.324</td>
<td>1.050</td>
</tr>
</tbody>
</table>

4.4.2 Effects of Excise Tax Regulation Regimes on Financial Performance

The study sought to understand the effects of excise tax regulation regimes on financial performance. Employees agreed that constructive changes in excise tax regulation regimes increases financial performance of manufacturing firms this was indicated by a mean of 4.118 and a standard deviation of 1.122. They also agreed that shorter excise tax regulation regime elasticities result to increase in the profitability of manufacturing firms in which it was shown by a mean of 3.647 and a standard deviation of 1.346. Respondents further agreed that fiscal consideration on excise tax regimes by manufacturing firms improves profitability which was indicated by a mean of 4.118 and a standard deviation of 0.977 and they disagreed that unexpected consumer response due to continuous changes in excise tax regimes results to an increase in profitability by a mean of 2.677 and a standard deviation of 1.273. The overall mean of excise tax regulation regimes was 3.640 and a standard deviation of 1.179 indicating that the respondents agreed that excise tax regulation regimes affect financial performance of manufacturing firms. The summary of the finding on the excise tax regulation regimes and financial performance is indicated in Table 4.5.
Table 4.5: Effects of Excise Tax Regulation Regimes on Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructive changes in excise tax regulation regimes increases financial performance of manufacturing firms.</td>
<td>34</td>
<td>4.118</td>
<td>1.122</td>
</tr>
<tr>
<td>Shorter excise tax regulation regime elasticities result to increase in the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.647</td>
<td>1.346</td>
</tr>
<tr>
<td>Fiscal consideration on excise tax regimes by manufacturing firms improves profitability.</td>
<td>34</td>
<td>4.118</td>
<td>0.977</td>
</tr>
<tr>
<td>Unexpected consumer response due to continuous changes in excise tax regimes results to an increase in profitability.</td>
<td>34</td>
<td>2.677</td>
<td>1.273</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>34</strong></td>
<td><strong>3.640</strong></td>
<td><strong>1.179</strong></td>
</tr>
</tbody>
</table>

4.4.3 Effects of Excise Tax Regulation Systems on Financial Performance

The study sought to understand the effects of excise tax regulation systems on financial performance. The employees agreed that predictable changing excise tax regulation systems increases profitability which is shown by a mean of 4.118 and standard deviation of 0.729 and that unevenness in excise tax regulation systems results improves profitability as shown by a mean of 3.382 and standard deviation of 1.181. The employees also agreed that imposition of high excise tax on large manufacturing firms positively affects profitability as shown by a mean of 2.441 and standard deviation of 1.330 and further agreed that imposition of low excise tax on small/medium manufacturing firms improves their profitability as shown by a mean of 3.618 and standard deviation of 1.303. The aggregate mean of excise tax regulation systems was 3.390 and a standard deviation of 1.179 indicating that the employees of manufacturing firms agreed that excise tax regulation systems affect financial performance. The summary of the finding on the excise tax regulation systems and financial performance is indicated in Table 4.6.
### Table 4.6: Effects of Excise Tax Regulation Systems on Financial Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictable changing excise tax regulation systems increases profitability of manufacturing firms.</td>
<td>34</td>
<td>4.118</td>
<td>0.729</td>
</tr>
<tr>
<td>Unevenness in excise tax regulation systems results improves profitability of manufacturing firms.</td>
<td>34</td>
<td>3.382</td>
<td>1.181</td>
</tr>
<tr>
<td>Imposition of high excise tax on large manufacturing firms positively affects profitability.</td>
<td>34</td>
<td>2.441</td>
<td>1.330</td>
</tr>
<tr>
<td>Imposition of low excise tax on small/medium manufacturing firms improves their profitability.</td>
<td>34</td>
<td>3.618</td>
<td>1.303</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.390</td>
<td>1.136</td>
</tr>
</tbody>
</table>

#### 4.5 Effects of Pricing Models of Excisable Goods on Financial Performance

The study sought to establish the effect of pricing models of excisable goods on financial performance. The scale was as from 1-5 where 1- strongly disagree, 2- disagree, 3- neutral, 4-agree and 5- strongly disagree. From the findings, a mean close to 5 shows that the respondents agreed with the variable while a mean close to 1 means that the respondents were in disagreement with the variable.

#### 4.5.1 Effects of Economic Pricing Model of Excisable Goods on Financial Performance

The study sought to understand the effects of economic pricing model of excisable goods on financial performance. The results indicated that decline in variable economic excise tax rates on excisable goods improves profitability of manufacturing firms as shown by a mean of 4.235 and standard deviation of 1.075. Employees also agreed that imposition of economic pricing on excisable goods results to price increase and improved profitability of firms as shown by a mean of 3.824 and standard of 0.936. They also agreed that the determinants of economic pricing model of excisable goods improve profitability which was indicated by a mean of 4.177 and standard deviation of 0.717. Employees disagreed that consumption reduction by consumers of excisable goods improves profitability of manufacturing firms as shown by a mean of 1.853 and standard deviation of 1.258. The overall mean of economic pricing model of excisable goods was 3.522 and a standard deviation of 0.997 indicating that the respondents agreed that economic pricing model of
excisable goods affect financial performance of manufacturing firms. The summary of the finding on the economic pricing model of excisable goods and financial performance is indicated in Table 4.7.

<table>
<thead>
<tr>
<th>Economic Pricing Model of Excisable Goods and Financial Performance</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decline in variable economic excise tax rates on excisable goods improves profitability of manufacturing firms.</td>
<td>34</td>
<td>4.235</td>
<td>1.075</td>
</tr>
<tr>
<td>Imposition of economic pricing result on excisable goods results to price increase and improved profitability of firms.</td>
<td>34</td>
<td>3.824</td>
<td>0.936</td>
</tr>
<tr>
<td>Determinants of economic pricing model of excisable goods improves profitability of manufacturing firms.</td>
<td>34</td>
<td>4.177</td>
<td>0.717</td>
</tr>
<tr>
<td>Consumption reduction by consumers of excisable goods improves profitability of manufacturing firms.</td>
<td>34</td>
<td>1.853</td>
<td>1.258</td>
</tr>
<tr>
<td>Average</td>
<td>34</td>
<td>3.522</td>
<td>0.997</td>
</tr>
</tbody>
</table>

4.5.2 Effects of Supply and Demand Pricing of Excisable Goods on Financial Performance

The study sought to understand the effects of supply and demand pricing of excisable goods on performance. The results show that employees agreed that the perceived quality due supply and demand pricing on excisable goods positively affects profitability as shown by a mean of 4.177 and standard deviation of 1.058 and positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms as shown by a mean of 4.412 and standard deviation of 0.557. Employees further agreed that negative price elasticity of demand on excisable goods results to an increase in profitability as shown by a mean of 3.059 and standard deviation of 1.301 and adopting a supply and demand pricing on excisable goods increases the profitability which is indicated with a mean of 3.824 and standard deviation of 0.936. The overall mean was 3.868 and a standard deviation of 0.963 indicating that the respondents agreed that supply and demand pricing of excisable goods affect financial performance of manufacturing firms. The finding on the supply and demand pricing of excisable goods and financial performance is indicated in Table 4.8.
Table 4.8: Effects of Supply and Demand Pricing of Excisable Goods on Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer perceived quality due supply and demand pricing on excisable goods positively affects profitability.</td>
<td>34</td>
<td>4.177</td>
<td>1.058</td>
</tr>
<tr>
<td>Positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms.</td>
<td>34</td>
<td>4.412</td>
<td>0.557</td>
</tr>
<tr>
<td>Negative price elasticity of demand on excisable goods results to an increase in profitability manufacturing firms.</td>
<td>34</td>
<td>3.059</td>
<td>1.301</td>
</tr>
<tr>
<td>Adopting a supply and demand pricing on excisable goods increases the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.824</td>
<td>0.936</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.868</td>
<td>0.963</td>
</tr>
</tbody>
</table>

4.5.3 Effects of Over Shifting Excise Duty Pricing on Financial Performance

The study sought to understand the effects of over shifting excise duty pricing on performance. The employees were in agreement that imposition of over shifting excise duty pricing positively affects the profitability as indicated by a mean of 3.941 and standard deviation of 1.099 and the immediate occurrence of price changes due to excise tax change increases the profitability as indicated by a mean of 2.559 and standard deviation of 1.106. They further agreed that predictable changes in demand and supply due to over shifting excise duty pricing increases profitability of manufacturing firm as indicated by a mean of 4.294 and standard deviation of 0.629 while they also disagreed that sharp changes in over shifting of excise tax on manufactured products improves profitability of manufacturing firms as indicated by a mean of 2.412 and standard deviation of 1.076. The overall mean was 3.301 and a standard deviation of 0.978 indicating that the respondents agreed that over shifting excise duty pricing affect financial performance of manufacturing firms. The finding on the over shifting excise duty pricing and financial performance is indicated in Table 4.9.
### Table 4.9: Effects of Over Shifting Excise Duty Pricing on Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imposition of over shifting excise duty pricing positively affects the profitability of manufacturing firms.</td>
<td>34</td>
<td>3.941</td>
<td>1.099</td>
</tr>
<tr>
<td>Immediate occurrence of price changes due to excise tax change increases the profitability of manufacturing firms.</td>
<td>34</td>
<td>2.559</td>
<td>1.106</td>
</tr>
<tr>
<td>Predictable changes in demand and supply due to over shifting excise duty pricing increases profitability of manufacturing firms.</td>
<td>34</td>
<td>4.294</td>
<td>0.629</td>
</tr>
<tr>
<td>Sharp changes in over shifting of excise tax on manufactured products improves profitability of manufacturing firms.</td>
<td>34</td>
<td>2.412</td>
<td>1.076</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.301</td>
<td>0.978</td>
</tr>
</tbody>
</table>

#### 4.5.4 Profitability of Manufacturing Firms

The researcher sought to understand the profitability of manufacturing firms. The results indicated that the firms are currently in a profit-making position. This was indicated by a mean of 3.677 and standard deviation of 1.173 and the profitability trend of the firms have been positive over the past five years and this was indicated by a mean of 3.353 and standard deviation of 1.203. The continuous profit declarations have impacted positively to the firms’ going concern and this was indicated by a mean of 3.412 and standard deviation of 1.373 and the firm's increasing profitability over time is related to the main operating activities by a mean of 4.118 and standard deviation of 0.977. The findings showed that the profitability trend of the firms is going to continue in the next five years as indicated by a mean of 4.177 and standard deviation of 0.717. The results of the study is indicated in the Table 4.10.
Table 4.10: Profitability of Manufacturing Firms

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm is currently in a profit-making position</td>
<td>34</td>
<td>3.677</td>
<td>1.173</td>
</tr>
<tr>
<td>The profitability trend of the firm has been positive over the past five years</td>
<td>34</td>
<td>3.353</td>
<td>1.203</td>
</tr>
<tr>
<td>Continuous profit declarations have impacted positively to the firm's going concern.</td>
<td>34</td>
<td>3.412</td>
<td>1.373</td>
</tr>
<tr>
<td>The firm's Increasing profitability over time is related to the main operating activities.</td>
<td>34</td>
<td>4.118</td>
<td>0.977</td>
</tr>
<tr>
<td>The profitability trend of the firm is going to continue in the next five years.</td>
<td>34</td>
<td>4.177</td>
<td>0.717</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>34</td>
<td>3.747</td>
<td>1.089</td>
</tr>
</tbody>
</table>

4.6 Inferential Statistics

4.6.1 Multiple Correlation Analysis

The study conducted a multiple correlation analysis to determine the relationship between the independent variables namely excise tax rates, excise tax regulation and pricing models and the dependent variable, financial performance of the manufacturing firms. Correlation coefficient was calculated to determine the strength of the relationship between dependent and independent variables. There was positive significant relationship between excise tax rates and financial performance at 5% significant level where \( r=0.751, p=0.000 \). On the second objective there was a statistically significant positive relationship between excise tax regulation and financial performance where \( r=0.679, p\text{-value}=0.000 \) and lastly there was statistically significant positive relationship between pricing models and financial performance where \( r=0.719, p\text{-value}=0.000 \) and the overall Sig. (2-tailed) value of 0.000 was less than 0.01 level of significance The facts of the findings are indicated in the Table 4.11.
Table 4.11: Multiple Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Profitability</th>
<th>Excise Tax Rates</th>
<th>Excise Tax Regulation</th>
<th>Pricing Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Pearson</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excise Tax Rates</td>
<td>Pearson</td>
<td>.751**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excise Tax Regulation</td>
<td>Pearson</td>
<td>.679**</td>
<td>.709**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Pricing Models</td>
<td>Pearson</td>
<td>.719**</td>
<td>.794**</td>
<td>.778**</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

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

4.6.2 Multiple Regression Analysis

The study sought to understand the multiple regression analysis to establish the effects of excise duty on the financial performance of manufacturing firms in Kenya. The findings are indicated in the subsequent sections.

Table 4.12: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.787a</td>
<td>.620</td>
<td>.582</td>
<td>.46788</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Pricing Models, Excise Tax Regulation, Excise Tax Rates

The findings of coefficient of determination and coefficient is shown in Table 4.11. The findings found out that coefficient of determination R² is 0.620 an indication that the
changes of profitability of manufacturing firms is caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. The residual or other factors not accounted in this model is 38.0% which can be explained by other factors beyond the scope of the current study.

Table 4.13: ANOVA, Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>10.714</td>
<td>3</td>
<td>3.571</td>
<td>16.314</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>6.567</td>
<td>30</td>
<td>.219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.281</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Profitability
b. Predictors: (Constant), Pricing Models, Excise Tax Regulation, Excise Tax Rates

The study carried out an ANOVA at 95% level of significance. The findings of F-value is shown in Table 4.13 above. The findings indicated that the variables; excise tax rates, excise tax regulation, and pricing models of excisable goods have significant effect on the financial performance of manufacturing firms in Kenya where the p-value is 0.000 less than the 0.05. The F-value is 16.314 and 33 degrees of freedom and the test is highly significant; we therefore conclude that there is a relationship between the study variables.

Table 4.14: Regression Coefficients

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.591</td>
<td>.558</td>
</tr>
<tr>
<td>Excise Tax Rates</td>
<td>.545</td>
<td>.237</td>
</tr>
<tr>
<td>Excise Tax Regulation</td>
<td>.625</td>
<td>.205</td>
</tr>
<tr>
<td>Pricing Models</td>
<td>.548</td>
<td>.284</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Profitability

The study used coefficient of regression to establish effects of excise duty on the financial performance of manufacturing firms in Kiambu County. The findings are indicated in Table 4.14. The study found out that by holding excise tax regulation and pricing models constant a unit change in excise tax rates will lead to 0.545 increase in profitability which was
statistically significant at 95% confidence level. The results also indicated that holding excise tax rates and pricing models constant a unit change in excise tax regulation will lead to 0.625 increase in profitability which was statistically significant at 95% confidence level and lastly holding excise tax rate and excise tax regulation constant a unit change in pricing models will lead to 0.548 increase in financial performance which was statistically significant at 95% confidence level.

4.7 Chapter Summary

The chapter presented the findings on the effects of excise duty on the financial performance of manufacturing firms in Kenya. Descriptive statistics such as mean and standard deviation was used in the analysis which indicated a strong relationship among the study variables. This was affirmed by both correlation and regression analysis which indicated strongly relationship for the variables; excise tax rates, excise tax regulation, and pricing models. The next chapter presents the discussion, conclusions and recommendations of the study to the policy makers in the manufacturing firms in Kenya.
5.0 DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction
The chapter presents the summary, discussion in relation with the literature review on the effects of excise duty on the financial performance of manufacturing firms in Kiambu County. The chapter presents the conclusions and recommendations for improvement and finally for further studies.

5.2 Summary

The general objective of the study was to establish the effects of excise duty on the financial performance of manufacturing firms in Kiambu County. The study was guided by the following specific objectives; to establish the effect of excise tax rates on the financial performance, to establish the effect of excise tax regulation on the financial performance, to establish the effect of pricing models of excisable goods on the financial performance of manufacturing firms in Kenya.

The research employed descriptive research design that helped in gathering information about the existing status of the phenomena. The study population comprised of representatives from the tax departments of the 39 manufacturing firms in Kiambu County. The study adopted the use of a census where the entire population formed the sample of the study. Therefore, the sample size were representatives from each of the tax departments from the 39 manufacturing firms. The study used primary data as the method to collect data with a structured questionnaire. The research questionnaire was divided into four sections and used a Likert Scale. The data was coded based on the Likert Scale and analyzed to test the level of significance of each variable. The study used descriptive statistics such as the percentages, mean and standard deviation to present the findings. The data was analyzed using a multiple regression model with the use of SPSS version 24 statistical analysis tool. The data from the study findings was represented in the form of tables and figures as this enhanced easier interpretation and understanding of the research findings.

The result of the study showed that there was positive significant relationship between excise tax rates and financial performance. The findings found out that coefficient of determination showed that the changes of financial performance of manufacturing firms is
caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. The employees agreed that capital accumulation due to excise tax transferability results to decline in firm profitability. Inadequate information on tax burden transferability decreases profitability of manufacturing firms indicating they were in disagreement and further disagreed that uncertainty due to transfer of excise tax burden to consumers results to decline profitability. The disparity in the structuring of excise tax rates on manufactured products decreases the profitability of manufacturing firms.

The findings of the study showed that there was a statistically significant positive relationship between excise tax regulation and financial performance. The findings found out that coefficient of determination showed that the changes of financial performance of manufacturing firms is caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. The employees agreed that predictable changing excise tax regulation systems increases profitability and that unevenness in excise tax regulation systems results improves profitability. The employees also agreed that imposition of high excise tax on large manufacturing firms positively affects profitability and further agreed that imposition of low excise tax on small and medium manufacturing firms improves their profitability.

The findings further showed that there was statistically significant positive relationship between pricing models and financial performance. The findings found out that coefficient of determination showed that the changes of financial performance of manufacturing firms is caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. The results show that employees agreed that the perceived quality due supply and demand pricing on excisable goods positively affects profitability and positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms. Employees further agreed that negative price elasticity of demand on excisable goods results to an increase in profitability and adopting a supply and demand pricing on excisable goods increases the profitability.

5.3 Discussion

5.3.1 Effects of Excise Tax Rates on Financial Performance

The findings of the study showed that transferability of tax rate burden has an effect on financial performance. The employees agreed that capital accumulation due to excise tax transferability results to decline in firm profitability. This is supported by the findings of
Seber and Arslan (2012) who noted that excise tax rate burden influences the rate of capital accumulation. Changing the return on capital, discourage saving and investment by economic agents such as manufacturing firms; hence excise taxes alter the intertemporal allocation of resources. They employees indicated that continuous transfer of excise tax rates on consumers decreases firm profitability. Inadequate information on tax burden transferability decreases profitability of manufacturing firms indicating they were in disagreement and further disagreed that uncertainty due to transfer of excise tax burden to consumers results to decline profitability.

The findings showed that the respondents agreed that excise rate tax structure has an effect towards financial performance of manufacturing firms. The employees of the manufacturing firms indicated that increased imposition of excise duty on luxurious products decreases the profitability of the firms. This is supported by Klassen, Lisowsky and Mescall (2014), who indicated that optimal excise tax transfer problem becomes a game of imperfect information between manufacturing firms and the revenue authorities. They further highlight that revenue authorities would like to impose excise tax to profitable manufacturing firms and give tax transfers to the less profitable manufacturing firms. Revenue authorities strive to ensure that the imposition of excise tax does not negatively affect the financial performance of profitable manufacturing firms. However, with revenue authorities imposing excise tax on specific manufacturing firms, this results in the transfer of the excise tax burden to consumers who incur additional costs when purchasing the products or services.

The disparity in the structuring of excise tax rates on manufactured products decreases the profitability of manufacturing firms. There is also an increase on imposition of excise duty on products classified as harmful for consumption which decreases the profitability of firms. Respondents further agreed that poor government framework on excise rate structure decreases the overall profitability of manufacturing firms. This is supported by the results of Bing, Lili, Yan and Mohib (2018) indicated that the findings indicated that transferability of excise tax burden affects financial performance

The findings showed that excise tax rate incentive has an effect towards financial performance of manufacturing firms. The employees disagreed that regular issuing of excise tax incentives results to a decline in the profitability of firms. This is supported by the results of Easson and Zolit (2003) who indicated that tax incentives can take the form
of tax holidays for a limited duration, current deductibility for certain types of expenditures, or reduced import tariffs or customs or excise duties. Excise tax rates incentives not only generate employment but also motivates the self-employed to incorporate into limited liability companies. This leads to improved profitability of the firms.

They agreed that shorter implementation duration of excise tax incentives decreases profitability of manufacturing firms. Employees further agreed that increased costs of excise tax incentives by government decreases the profitability of manufacturing firms. Limited availability of information on excise tax incentives by manufacturing firms decreases firm profitability. This was in agreement with the findings of Hedia, Amira, Jameleddine and Jaleleddine (2011) in which they established that regular excise tax rates incentives positively affect the financial performance. There was positive significant relationship between excise tax rates and financial performance. The findings found out that showed that the changes of financial performance of manufacturing firms is caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. This was supported by Kuria (2016) who established that excise tax rate incentives positively affected the financial performance of EPZs in Kenya.

**5.3.2 Effects of Excise Tax Regulation on Financial Performance**

The findings showed that the respondents agreed that excise regulation planning affect financial performance of manufacturing firms. The employees disagreed that non-compliance of excise tax regulation increases the profitability and respondents agreed that foreseeable excise rate regulation patterns increase profitability of manufacturing firms. This was in agreement with the findings of Desislava and Nikolay (2012) indicated that the efficiency of excise taxation and particularly the excise tax structure plays important role in achieving economic growth and fiscal consolidation. Employees strongly agreed that favorable excise regulation planning environment improves profitability of firms and that redundant aggressive excise tax planning strategies by manufacturing firms increase profitability.

The results showed that employees agreed that constructive changes in excise tax regulation regimes increases financial performance. Seyram and Kportorgbi (2014) collaborated that the effects of excise tax regulation planning on the firm performance. The results indicated that that firms’ tendency to engage in intensive excise tax regulation planning activities
reduces when tax authorities maintain low corporate income tax rates. They also agreed that shorter excise tax regulation regime elasticities result to increase in the profitability of manufacturing firms and respondents further agreed that fiscal consideration on excise tax regimes by manufacturing firms improves profitability and they disagreed that unexpected consumer response due to continuous changes in excise tax regimes results to an increase in profitability. This is supported by the results of Izuchukwu and Chude (2015) who established that the impact of both income tax and excise tax regulation planning on the financial performance of Breweries Firms in Nigeria. The study revealed that the level of excise tax regulation has significant effect on the profitability, which drew the conclusion that excise tax regulation has significant effect on profitability. This was in agreement with the results of Karianya (2013) conducted a study to establish the effects of taxation on economic growth with emphasis on the financial performance of various economic sectors in Kenya. The results revealed overall significance of the explanatory variables in explaining GDP. The study findings revealed that excise tax regulation systems affect financial performance and the economy.

The results showed that the employees of manufacturing firms agreed that excise tax regulation systems affect financial performance. The employees agreed that predictable changing excise tax regulation systems increases profitability and that unevenness in excise tax regulation systems improves profitability. The employees also agreed that imposition of high excise tax on large manufacturing firms positively affects profitability and further agreed that imposition of low excise tax on small and medium manufacturing firms improves their profitability. This was supported by the findings of Olaoye, Ogunleye and Solanke (2018) conducted a study to establish the effects of excise tax regulation systems on financial performance. The study concluded that excise tax regulation systems has a significant impact on financial performance.

The results showed that there was a statistically significant positive relationship between excise tax regulation and financial performance. The findings indicated that the changes of financial performance of manufacturing firms are caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. This was in agreement with the findings of Bidin and Perabavathi (2018), conducted a study to determine the level of excise duty regulation planning. The results from regression analysis indicated that penalty rate, the probability of detection and tax knowledge revealed a positive and significant relationship with excise duty compliance.
The findings of Adegbite and Owolabi (2017) were in disagreement with the results which indicated that excise tax regulation planning has a negative impact both in the short run and long run on profitability and investment of manufacturing firms in West Africa. Similarly, Gatsi, Gadzo and Kportorgbi (2013), conducted a study to establish the effects of changes in excise tax regulation systems on financial performance of listed manufacturing firms in Ghana. The study revealed that there is a significant negative relation between changes in excise tax regulation systems and financial performance.

5.3.3 Effects of Pricing Models of Excisable Goods on Financial Performance

The findings showed economic pricing model of excisable goods affect financial performance of manufacturing firms. The results indicated that decline in variable economic excise tax rates on excisable goods improves profitability of manufacturing firms. This was in agreement with the findings of Vatuiu, Tarca, Udrica and Popeanga (2010) who indicated that the growing trend of trade liberalization policies with other countries such as free trade areas needs to be considered as import duty rates gradually disappear and therefore no longer provide a source of government revenue. This means that pricing models of excisable goods is becoming increasingly important. There are three things that determine the economic pricing models of excisable goods and this include the excise burden, the excise system, and the structure of excise rates. Employees further disagreed that consumption reduction by consumers of excisable goods improves profitability.

The results showed that the respondents agreed that supply and demand pricing of excisable goods affect financial performance. The results indicated that employees agreed that the perceived quality due to supply and demand pricing on excisable goods positively affects profitability and positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms. Employees further agreed that negative price elasticity of demand on excisable goods results to an increase in profitability and adopting a supply and demand pricing on excisable goods increases the profitability. This was supported by the findings of Surjono (2018) who indicated that increase in tax rates can be borne entirely by the firms so that they do not cause price increases which are more likely to occur when any tax increase is significant but the demand for the product is elastic and they risk losing market share. This directly impacts the firm financial performance.
The results showed that respondents agreed that over shifting excise duty pricing affect financial performance of firms. The employees were in agreement that imposition of over shifting excise duty pricing positively affects the profitability and the immediate occurrence of price changes due to excise tax change increases the profitability. This was in agreement with the results of and Hansen (2017) who conducted a study to establish whether excise taxes of specific manufactured products are passed on to prices and how this affects financial performance. The study findings indicated that over shifting of excise taxes determine the pricing models of the various products and as excise tax keeps on changing, this also impacts the price of the products thus a significant impact on financial performance. The employees indicated that They further agreed that predictable changes in demand and supply due to over shifting excise duty pricing increases profitability of manufacturing firm while they also disagreed that sharp changes in over shifting of excise tax on manufactured products improves profitability of firms.

The results of the study showed that there was statistically significant positive relationship between pricing models and financial performance and the coefficient of determination showed the changes of financial performance of manufacturing firms are caused by excise tax rates, excise tax regulation, and pricing models of excisable goods. This is supported by the findings of Priya and Nimalathasan (2013) who conducted a study to establish the determinants of pricing models adopted by listed manufacturing firms on excisable goods and how it affected their performance in Sri Lanka. The study findings established that pricing models on excisable goods had a great impact of both return on investment and return on assets. The findings of the study were in disagreement with that of Hidayat and Nasruddin (2015) who conducted a study to establish the impact of economic pricing models on cigarette consumption and financial performance of cigarette manufacturing firms in Indonesia. The results indicated that pricing models of cigarettes as an excisable good in Indonesia has a greater impact on raising cigarette prices, reducing consumption, and increasing government revenue than regularly increased excise rates.

5.4 Conclusions

5.4.1 Effects of Excise Tax Rates on Financial Performance

The study concludes that continuous transfer of excise tax rates on consumer service decreases firm profitability. Inadequate information on tax burden transferability decreases profitability of manufacturing firms. The employees indicated that there is increased
imposition of excise duty on luxurious products decreases the profitability and that regular issuance of excise tax incentives results to an increase in the profitability of firms.

5.4.2 Effects of Excise Tax Regulation on Financial Performance

The study concludes that that favorable excise regulation planning environment improves profitability of firms and that redundant aggressive excise tax planning strategies by manufacturing firms increase profitability. The employees also agreed that imposition of high excise tax on large manufacturing firms positively affects profitability and the imposition of low excise tax on small and medium manufacturing firms improves manufacturing firm’s profitability. There was a positive and significant relation between the profitability and the excise tax regulation indicates that policy measures to expand tax revenue through more effective excise tax administration will impact positively on growing the company’s profitability.

5.4.3 Effects of Pricing Models of Excisable Goods on Financial Performance

The study concludes that perceived quality due to supply and demand pricing on excisable goods positively affects profitability and positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms. Over shifting of excise taxes determine the pricing models of the various products and as excise tax keeps on changing, this also impacts the price of the products thus a significant impact on financial performance. The over shifting of the excise tax has positive implications on pricing models which have a significant relationship on the financial performance of manufacturing firms.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Effects of Excise Tax Rates on Financial Performance

The study recommends that the Kenya Revenue Authority should strive to ensure that the imposition of excise tax does not affect the financial performance manufacturing firms. There should be more awareness among manufacturing firms in Kenya on the tax incentive available to them so that they can take advantage of them. They should be encouraged to take advantage of tax incentives in order to enhance their financial performance.
5.5.1.2 Effects of Excise Tax Regulation on Financial Performance

The study recommended that the government should continuously review excise tax regulation in order to enhance financial performance of manufacturing firms and the level of investment both local and foreign direct investment which will invariably reduce poverty and unemployment rates in the country. The study recommended that governments should expand the excise tax yield through improved tax system regulation and administration and the manufacturing firms should make excise tax planning as part of the firm’s strategic financial planning in order to further influence financial performance positively.

5.5.1.3 Effects of Pricing Models of Excisable Goods on Financial Performance

The study recommends that there should be over shifting of excise taxes which determine the pricing models of the manufacturing firms in Kenya which keeps on changing, this also impacts the price of the products thus a significant impact on financial performance. There is need for firms that produce excisable goods to efficiently and effectively consider their pricing models.

5.5.2 Recommendations for Further Studies

The aim of the study was to determine the effects of excise duty on the financial performance of manufacturing firms in Kiambu County. Further studies can be looked into the effects of excise duty on the profitability of service sectors in the economy for example the banking sector so that a clear comparison can be generalized. This will allow the revenue authority to have a clear guideline on the excise duty.
REFERENCES


APPENDICES

APPENDIX ONE: INTRODUCTION LETTER

Virginia Mwangi
United States International University- Africa
NAIROBI, KENYA
Dear Sir/ Madam,

RE: DATA COLLECTION REQUEST

I am a graduate student at United States International University (USIU- Africa) pursuing Master of Business Administration in Finance (MBA). I am currently conducting a research on the “Effects of Excise Duty on the Financial Performance of Manufacturing Firms in Kiambu County” This is a requirement to receive a Master Degree at USIU-Africa.

The study focusses on manufacturing firms that are charged excise duty by the Government in Kiambu County and you have been selected as one of the respondents in the study. The results of the study will be fundamental to manufacturing firms to understand the role that the imposition of excise taxation affects their financial performance.

This is an academic research and confidentiality will strictly be adhered to. Your name will not appear anywhere in the report. Kindly spare some of your time to complete the questionnaire attached by using (√), (X) or writing the answers in the spaces provided.

Thank you for your cooperation and time.

Virginia Mwangi

0732907670
### APPENDIX TWO: RESEARCH QUESTIONNAIRE

**Section A: Background Information**

1. Kindly indicate your gender

| Male | Female |

2. Which age group do you belong?

| 18-25 Years |   |
| 26-35 Years |   |
| 36-45 Years |   |
| 46-55 Years |   |
| Above 56 Years |   |

3. Kindly indicate your highest level of education.

| Certificate |   |
| Diploma |   |
| Undergraduate |   |
| Graduate |   |
| Doctorate |   |

4. Kindly indicate how long you have been an employee of your company

| 0-3 years |   |
| 4-6 years |   |
| 7-10 years |   |
| 11-13 years |   |
| 14-16 years |   |
| Above 16 years |   |
Section B: Effects of Excise Tax Rates on Financial Performance

Kindly indicate the extent to which you agree or disagree with the following statements on the effects of excise tax rates on financial performance. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Capital accumulation due to excise tax transferability results to decline in firm profitability.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6.</td>
<td>Continuous transfer of excise tax rates on consumer product/service decreases firm profitability.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7.</td>
<td>Inadequate information on tax burden transferability decreases profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8.</td>
<td>Uncertainty due to transfer of excise tax burden to consumers results to decline profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Transferability of Tax Rate Burden**

| 9.  | Increased imposition of excise duty on luxurious products decreases the profitability of manufacturing firms. | 1 2 3 4 5 |
| 10. | Disparity in the structuring of excise tax rates on manufactured products decreases the profitability of manufacturing firms. | 1 2 3 4 5 |
| 11. | Increased imposition of excise duty on products classified as harmful for consumption decreases the profitability of manufacturing firms. | 1 2 3 4 5 |
| 12. | Poor government framework of excise rate structure decreases the overall profitability of manufacturing firms. | 1 2 3 4 5 |

**Excise Rate Tax Structure**

| 13. | Regular issuing of excise tax incentives results to a decline in the profitability of manufacturing firms. | 1 2 3 4 5 |

**Excise Tax Rate Incentives**

15. Increased costs of excise tax incentives by government decreases the profitability of manufacturing firms.  

16. Limited availability of information on excise tax incentives by manufacturing firms decreases firm profitability.  

---

**Section C: Effects of Excise Tax Regulation on Financial Performance**

Kindly indicate the extent to which you agree or disagree with the following statements on the effects of excise tax regulation on financial performance. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Excise Regulation Planning</strong></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Non-compliance of excise tax regulation increases the profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18.</td>
<td>Foreseeable excise rate regulation patterns increase profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19.</td>
<td>Favorable excise regulation planning environment improves profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20.</td>
<td>Redundant aggressive excise tax planning strategies by manufacturing firms increases profitability.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td><strong>Excise Tax Regulation Regimes</strong></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Constructive changes in excise tax regulation regimes increases financial performance of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>22.</td>
<td>Shorter excise tax regulation regime elasticities results to increase in the profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>No.</td>
<td>STATEMENT</td>
<td>SCALE</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>Fiscal consideration on excise tax regimes by manufacturing firms improves profitability.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>24.</td>
<td>Unexpected consumer response due to continuous changes in excise tax regimes results to an increase in profitability.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Excise Tax Regulation Systems**

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.</td>
<td>Predictable changing excise tax regulation systems increases profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>26.</td>
<td>Unevenness in excise tax regulation systems results improves profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>27.</td>
<td>Imposition of high excise tax on large manufacturing firms positively affects profitability.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>28.</td>
<td>Imposition of low excise tax on small/medium manufacturing firms improves their profitability.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Section D: Effects of Pricing Models of Excisable Goods on Financial Performance**

Kindly indicate the extent to which you agree or disagree with the following statements on the effects of pricing models of excisable goods on financial performance. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>Decline in variable economic excise tax rates on excisable goods improves profitability of manufacturing firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>30.</td>
<td>Imposition of economic pricing result on excisable goods results to price increase and improved profitability of firms.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>Determinants of economic pricing model of excisable goods improves profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>32.</td>
<td>Consumption reduction by consumers of excisable goods improves profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Supply and Demand Pricing of Excisable Goods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>Consumer perceived quality due supply and demand pricing on excisable goods positively affects profitability.</td>
<td>1</td>
</tr>
<tr>
<td>34.</td>
<td>Positive elasticity of demand and supply of excisable goods improves profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>35.</td>
<td>Negative price elasticity of demand on excisable goods results to an increase in profitability manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>36.</td>
<td>Adopting a supply and demand pricing on excisable goods increases the profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Over Shifting Excise Duty Pricing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>Imposition of over shifting excise duty pricing positively affects the profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>38.</td>
<td>Immediate occurrence of price changes due to excise tax change increases the profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>39.</td>
<td>Predictable changes in demand and supply due to over shifting excise duty pricing increases profitability of manufacturing firms.</td>
<td>1</td>
</tr>
<tr>
<td>40.</td>
<td>Sharp changes in over shifting of excise tax on manufactured products improves profitability of manufacturing firms.</td>
<td>1</td>
</tr>
</tbody>
</table>

**Section E: Financial Performance of Manufacturing Firms**

Kindly indicate the extent to which you agree or disagree with the following statements on the financial performance of manufacturing firms. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

70
<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.</td>
<td>The firm is currently in a profit-making position</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>42.</td>
<td>The profitability trend of the firm has been positive over the past five years</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>43.</td>
<td>Continuous profit declarations have impacted positively to the firm's going concern.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>44.</td>
<td>The firm's increasing profitability over time is related to the main operating activities.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>45.</td>
<td>The profitability trend of the firm is going to continue in the next five years.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
APPENDIX THREE: NACOSTI PERMIT

This is to certify that Miss. VIRGINIA MWANGI of USIU AFRICA, has been licensed to conduct research in Kiambu on the topic: EFFECTS OF EXCISE DUTY ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA: CASE OF MANUFACTURING FIRMS IN KIAMBU COUNTY for the period ending: 29/July/2020.

Referred to as: 682033

Date of Issue: 29/July/2019

License No: NACOSTEP/19/134

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

NOTE: This is a computer generated License. To verify the authenticity of this document, scan the QR Code using QR scanner application.
THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies
5. The License does not give authority to transfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice