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**EFFECT OF CORPORATE TAXATION ON INVESTOR ATTRACTION OF
LISTED MANUFACTURING FIRMS IN KENYA**



**A RESEARCH DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE IN
DEVELOPMENT FINANCE AT STRATHMORE UNIVERSITY BUSINESS
SCHOOL**

MAY 2023

Declaration

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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Approval

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ABSTRACT

The manufacturing sector in Kenya has been a key component to the robust growth in the country's total productivity. According to the vision 2030, the ambition of the Big Four Agenda is to raise the sector's contribution to 15 per cent of GDP by 2022. However, in recent years the contribution of the sector has been declining and the performance of the listed manufacturing companies has been volatile. The sector has been experiencing a falling GDP share in recent years from 9.3 per cent in 2016 to 7.2 per cent in 2020. The share of formal employment in manufacturing sector has also largely remained stagnant in the same period at 11 per cent to the total formal sector employment. Despite manufacturing being a key pillar in the development agenda, the country generally lacks a predictable and stable tax policy that gives manufacturers a long-term view to enable them to make appropriate growth plans. This study therefore utilised Kenyan listed manufacturing firm-level panel data set over the period 2009 - 2021 to investigate the nexus between corporate taxation and investor attraction in the manufacturing sector in Kenya. The research adopted the neoclassical investment theory and the Q theory of investment in guiding the study. The study used a panel data regression model which allowed for the handling of not only the dynamic structure of the model and of the predetermined or endogenous explanatory variables, but also firm-specific factors, macroeconomic effects, heteroskedasticity, and autocorrelation of individual observations. The study revealed that corporate taxation held a significant effect on investor attraction of listed manufacturing companies in Kenya. In terms of the individual proxies for corporate taxation; tax incentives did not have a significant effect on investor attraction. However, effective tax rate and tax progressivity had a significant effect on investor attraction. Given the significance of taxation on investor attraction, the study recommends the need for policy makers to create a more effective and pro-industry national taxation structure that carefully considers the impact of the mutual effect of tax incentives, effective tax rate and tax progressivity on investment attraction of firms in the country. By addressing issues related to clear tax policy objectives, frequent changes in the tax code and multiple taxation, the government can improve the economy's competitiveness and value proposition to attract investors.

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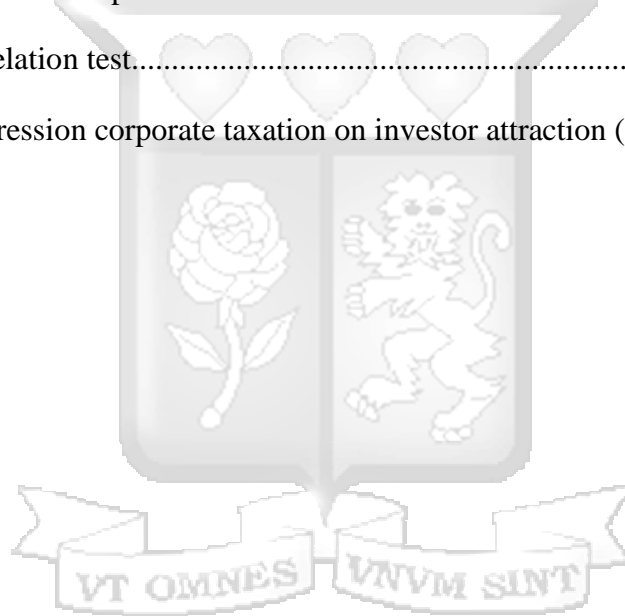
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DEFINITION OF TERMS

Corporate tax	Corporate tax rate represents the tax charge that is levied on the profits made by corporations which are legally in operation within a country (Federici & Parisi, 2015).
Effective tax rate	This is computed as the actual income tax expenses incurred by a firm as a percentage of accounting profit before corporate tax expense for a given financial year. ETR is a measure of the effective tax burden.
Marginal tax rate	This is the additional amount of tax that is paid for every additional income earned.
Investment	An investment is defined as the commitment of funds/capital to buy a financial instrument/asset to attain returns in the form of either interest, income or in the form of value appreciation (Mayo, 2020).
Investor attraction	Investor attraction focusses on improving the participation of investors in the market which can be pegged on the positive returns of an investment (Prohorovs, 2013).
Tax progressivity	Tax progressivity refers to the situation where the tax rate for an individual or business increases as the taxable income improves (Gerber C. , Klemm, Liu, & Mylonas, 2020).
Tax incentives	Preferential tax treatments given to qualified investment projects to encourage certain economic activities (Klemm & Van Parys, 2012).

LIST OF ABBREVIATIONS

ATR	Average Tax Rate
CIT	Corporate Income Tax
EATR	Effective Average Tax Rate
EMTR	Effective Marginal Tax Rate
ETR	Effective Tax Rate
EPZ	Export Processing Zones
FEM	Fixed Effect Model
GDP	Gross Domestic Product
NSE	Nairobi Securities Exchange
PAYE	Pay as You Earn
REM	Random Effect Model
ROA	Returns On Assets
ROCE	Returns On Capital Employed
ROE	Returns On Equity
ROI	Return On Investment
UNIDO	United Nations Industrial Development Organization
VAT	Value Added Tax



CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Globally, the manufacturing sector has been central to transformative economic development by stimulating and sustaining high productive growth, boosting employment, and facilitating exports, thus building competitiveness (Johansson, Malmsköld, Fast-Berglund, & Moestam, 2019). According to McKinsey Global Institute (2018) the global manufacturing industry accounts for 16% of the global Gross Domestic Product (GDP) and 14% of the employment. Okeyo (2022) affirms that the manufacturing sector plays an essential role in promoting economic diversification, job creation and industrialization and countries must use incentives to foster competitiveness of industries in the sector.

In Africa, the manufacturing industry has been heralded as a key growth tool that can help connect the continent and accelerate its development. The industry is projected to reach \$666.4 billion in 2030 which will place the continent among the largest leading manufacturing bloc (Banga & te Velde, 2018). Deloitte (2022) reports that despite the setbacks brought by the pandemic, the manufacturing industry has shown resilience in building back and has not been significantly deterred by the supply chain, labor and global uncertainties. The Deloitte outlook report indicates that the industry's ability to be agile is critical to economic rebound which is key to improved revenue optimism and better returns for investors in the post-pandemic era.

In Kenya, the manufacturing sector plays a critical role in the development of the economy. However, despite the sector's importance, Kenya, like most developing countries has struggled to develop a robust manufacturing sector, and the country's growth is mainly attributed to the agricultural and services sectors (Mantravadi & Møller, 2019). The sector's share of GDP has experienced a proportionate reduction from 9.3 per cent in 2016 to 7.6 per cent in 2020 coupled with a share of formal employment that has largely remained stagnant at 11 per cent to the formal sector employment. The sector has also seen a decline of the share of manufactured exports to total exports from 31 per cent to 28 per cent in the same period as compared to countries like Vietnam whose average is 84 per cent and Egypt 50 per cent (Kenya Association of Manufacturers, 2022). There are ambitious plans in place to stimulate the growth of Kenya's manufacturing sector. The Big Four Agenda and vision 2030 has a bold plan of raising the sector's contribution to 15 per cent of GDP by 2022. This would have a multiple effect in the economy by raising formal employment in the sector from 293,000 to 500,000 employees and ultimately expand the tax base. The Kenya's National Export Development and Promotion

Strategy (NEDPS) has also committed to increase the proportion of manufacturing firms in Kenya that have export sales from the current 6 per cent to 20 per cent by 2028 (Kenya Association of Manufacturers, 2022). These ambitious plans however must be accompanied by investments in the sector.

Increasing the level of investment from both local and foreign players is key in driving growth of manufacturing sector and the entire economy at large. Verhoogen (2021) posits that developing countries can adopt and benefit from already developed advanced technologies in industrialized nations through a process called industrial upgrading. Foreign Direct Investment (FDI) is one key driver of industrial upgrading of Kenya's manufacturing sector through resources and technology transfer from foreign investors. According to the Product Market Regulation Index, Kenya has a higher barrier to trade and investment as compared to the Organisation for Economic Co-operation and Development (OECD). From 2010 to 2019, Kenya's net FDI inflows averaged 1.82 per cent of GDP as compared to countries like Vietnam and Ghana whose net inflows averaged 22.98 per cent and 5 per cent of GDP respectively. Kenya's net FDI inflows have remained stagnant in the last four years of that decade (Kenya Association of Manufacturers, 2022).

Stimulating investments depends on a country's business environment and the presence of policies that promote trade and competition. In order for Kenya to attract more investments, both local and foreign, understanding the drivers of investor attraction is crucial for policymakers. One important policy in any business environment is the jurisdiction's tax policies. In the United States, Ohrn (2019) provided evidence that depreciation tax incentives have significant effects on investment in the U.S. manufacturing sector. Similarly, in the UK, Maffini, Xing and Devereux (2019) showed increased investment among firms that qualified for first-year depreciation allowances. The effect of tax policy on FDI has gained significant attention, however this subject has areas that have remained under-researched. Previous studies on the subject showed mixed results and have relied on traditional metrics like tax expenses to measure impact on firm performance. Most of the studies also done on the areas of the effect of tax incentives on FDI have focused on developed countries. Very few studies have examined the role that corporate taxation utilising the proxies tax incentives, tax progressivity and effective tax rates have on investor attraction in a particular sector of the economy. These three variables are employed so as to examine the robustness of the finding and may better capture the effect of taxation. Studies on impacts on determinant's effective tax rates after tax reforms and how companies respond to any tax changes are also limited. In consideration of the

aforementioned under-researched areas, this study aims to fill this gap by investigating the role that the tax incentives, tax progressivity and effective tax rates have on investor attraction by using panel data from the listed manufacturing companies in Kenya.

1.1.1 Kenya's Tax Structure

A tax structure describes the general classification of taxes in a tax system (Gashi, Asllani, & Boqolli, 2018). According to the Kenya Revenue Authority (2022), Kenya's tax structure constitutes income tax (corporation tax, PAYE, Withholding, advance, instalment taxes), rental income tax, value added tax, excise duty and capital gains tax. Taxes play an important role on investment decisions, as they are a key determinant of the cost of capital. An effective tax system can improve economic growth through attracting investments and spurring entrepreneurship (Ahmad, Sial, & Ahmad, 2016).

In a bid to compete for investments, Kenya has undergone major tax changes over the years with regard to corporate taxation. Motivated by competition for foreign investments, the reforms in Kenya regarding Corporate Income Tax (CIT) have been in the direction of lowering the rates. This has seen the lowering of CIT rates from as high as 45 per cent in 1989 to 30 percent presently. Kenya also has a differentiated CIT rate for foreign owned companies which have generally had higher CIT rates as compared to the locally owned counterparts in a bid to encourage domestic owned companies. Regarding tax incentives through the CIT system, Kenya has used taxation as an instrument to develop an export-led industrialisation strategy. This has been through zero-rating or exempting raw materials from VAT and adopting an excise tax regime that would drive investments in manufacturing commodities that would be competitive in export markets. Tax holidays has also been used as an incentive to companies looking to invest in the country for export (Karingi, et al., 2005).

According to Gashi, Asllani and Boqolli (2018), not all tax systems stimulate economic growth, with the research showing a positive relationship between profit taxes, corporate taxes, value added tax, property rights, rental taxes and taxes on interest and economic growth. Although tax incentives are widely used by governments to attract investment in preferred industries such as the manufacturing industry, Mukherjee, Singh and Žaldokas (2017) and Federici and Parisi (2015) provide evidence that corporate taxes were detrimental to investor profits. This finding is supported by Jacob, Michaely and Müller (2017) who acknowledged that consumption taxes resulted in a negative effect on the investment policy of firms. Assidi, Aliani, and Omri (2016) reported that a reduction in effective tax rate increases firm profitability and attracts

investment. Ohrn (2018) study showed that reducing effective corporate tax rates stimulates investment and growth in dividend payout. Mohammad and Ahmed (2019) research indicated that after-tax cash flow was a key determinant of improved investment decisions within financial institutions. Vržina and Dimitrijeviæ (2020) noted that lower effective rates improve firm profitability resulting in attraction of investors.

Progressive taxes refer to taxes that increase as the taxable income increases (Gerber, Klemm, Liu, & Mylonas, 2020). Tax progressivity can be high or low and in Kenya, companies listing at least 20 per cent, 30 per cent and 40 per cent of the issued share capital are taxed at 27 per cent for three years, 25 per cent for the five years and 20 per cent for five years respectively (ITA, 2010). In a higher tax progressive environment, a taxpayer was faced by a very low tax at initial stages but will increase steeply with increase in taxable income and the vice-versa holds (Heathcote, Storesletten, & Violante, 2017). Having a progressive taxation is an effective redistributive tool in times of growing inequality (Jacob, Michaely, & Müller, 2017). Fossen, et al., (2020) indicated that lower income taxes encourage investment in productive entrepreneurial ventures. However, Arulampalam and Papini (2018) found out that higher tax progressivity is associated with improved entrepreneurial activity due to the increases in deductibles.

Through the Finance Act, Kenya has experienced a raft of tax changes over the years that have had substantial implications on the manufacturing sector. With new additions, removals and changes in corporate taxation with regard to CIT, consumption taxes, excise taxes and the tax incentives therein, this research aims to study these effects of corporate taxation reforms on the investor attraction of the manufacturing industry in Kenya. It is an opportunity to assess how manufacturing firms respond to variations in tax legislations in terms of the number of tax incentives the firm qualifies for, the effective tax rates and the tax progressivity at the firm level and how these affect investment attraction.

1.1.2 Investor Attraction

Firms aim to meet stakeholder goals by making financing and investment decisions that aid the realization of the firm's objective (Eniola & Akinselure, 2016). According to Kayode, Olayiwola and Abass (2021), firms have to be profitable to attract investors. The expected returns have to be higher than the investment to generate sustainable investment sources (Grant & Yeo, 2018). Investor attraction focusses on improving the participation of investors in an industry by leveraging the positive returns of an investment (Prohorovs, 2013). Governments

aim to increase sector wide attractiveness to create optimal conditions that encourage investment to increase income generation on invested capital, to expand enterprises' income generating activities, and to enhance competitiveness (Binda, et al., 2020).

This study used an investment ratio so as to offer a multi-stakeholder view on the Kenyan manufacturing environment. Tobin's Q was utilized as the measure of investor attraction. According to Chung & Pruitt (1994), Tobin's Q which is defined as "the ratio of the market value of a firm to the replacement cost of its assets" has been employed to explain a number of corporate phenomena including investments and diversification decisions. Accordingly our study used the Q calculation adapted from Chung & Pruitt (1994) as the basis for measurement of our dependent variable. Tobin's Q as a measure for investment attraction is consistent with a study by Cheong, Lee, & Weissmann (2020) which utilized same dependent variable in its research on tax structure and investment attraction of Malaysian manufacturing SMEs.

1.1.3 Listed Manufacturing Companies

Manufacturing is defined as " the physical or chemical transformation of materials of components into new products, whether the work is performed by power- driven machines or by hand, whether it is done in a factory or in the worker's home, and whether the products are sold at wholesale or retail. Included are assembly of component parts of manufactured products and recycling of waste materials" (International Standard Industrial Classification of All Economic Activities, 1990). Kenya Association of Manufacturers (KAM) has grouped members into 14 sectors based on the UNIDO classification which include Agriculture Sector/Agro-processing, Automotive, Building, Mining and Construction, Chemical & Allied, Energy, Electrical and Electronics, Food and Beverages, Leather and Footwear, Metal and Allied, Paper, Pharmaceutical and Medical Equipment, Plastics and Rubber, Textile and Apparels Sector, Timber and lastly Services and Consultants (Kenya Association of Manufacturers, 2023).

The study therefore selected all the listed companies in the Nairobi Securities Exchange (NSE) under its sectors based on the above definition and KAM classification. The population of the study was therefore comprise; nine firms listed in the manufacturing and allied sector, six firms listed in the agricultural sector and five firms listed in the construction and allied sector. The entire population was 20 firms across 3 sectors listed in the NSE. This therefore provided a comprehensive review of the manufacturing industry in Kenya and therefore results will provide a more holistic view on the industry.

1.2 Statement of the Problem

Despite its role, Kenya Association of Manufacturers (2022) reports that growth in the manufacturing sector has stagnated in recent years. Most of the challenges facing manufacturers has been ascribed to managerial challenges and macroeconomic factors such as the tax regime which have reduced the firm's market value and attractiveness (Mathuva, Wachira, & Injeni, 2019). Empirical evidence shows that fiscal policies have a significant impact on firms' performance and overall industry attractiveness (Lyon & McBride, 2018). However, previous studies showed mixed results. Melo-Becerra, Mahecha, & Ramos-Ferero (2021) found that lower corporate taxes, tax deductions, and exemptions all increased corporate investment. Cheong, Lee, & Weissmann (2020) observed that the number of tax incentives a company qualifies for supports profitability but interestingly did not seem to impact investor attraction. The study also found that average tax rates and tax progressivity lowers profitability but increase investor attraction. Asih (2020) results however were contrary to the widely held view that tax incentives are positively related to FDI.

This study departs from previous studies in three key ways. First, previous studies identified gaps related to the dataset and variables utilised. Previous studies in Kenya have relied on traditional metrics such as tax expenses as a measure of tax policy (Mutisya, Muturi, & Kemboi, 2019; Mwangi, 2019; Evans, Kariuki, & Wafula, 2022). This study used tax incentives, tax progressivity and effective tax rates as the proxies for corporate taxation so as to examine the robustness of the finding. These proxies capture better the effect of taxation taking into consideration frequent tax changes through the annual finance bill in the form of introduction and dropping of tax incentives which affect tax liabilities of firms and in turn affect the overall tax progressivity at firm level and the firm's tax burden as measured by the effective tax rate. Second, previous studies identified gaps related the empirical approaches employed. This study relied on panel data regression techniques which are considered a better approach considering the heterogeneity of the data. Third, studies on the the role that corporate taxation have on investor attraction in the context of frequent tax code changes are also limited. Kenya has experienced unpredictable and significant changes in the tax code through the annual Finance Bill. In consideration of the aforementioned under-researched areas, this study provided a more comprehensive analysis by investigating the role that the mutual effect of tax incentives, tax progressivity and effective tax rates on investor attraction at the firm level by using panel data from the listed manufacturing companies in Kenya.

1.3 Research Objectives

1.3.1 General Objective

The main objective of the study was to establish the effect of corporate taxation on investor attraction of manufacturing companies listed on the NSE, Kenya.

1.3.2 Specific Objectives

In order to address the general objective, the study:

- i. Examined the effect of tax incentives on investor attraction of listed manufacturing companies in Kenya.
- ii. Examined the effect of effective tax rate on the investor attraction of listed manufacturing companies in Kenya.
- iii. Examined the effect of tax progressivity on the investor attraction of listed manufacturing companies in Kenya.

1.4 Research Hypotheses

The research focused on testing the following hypotheses;

H₀₁ There is no statistically significant effect of tax incentives on the investor attraction of listed manufacturing companies in Kenya.

H₀₂ There is no statistically significant effect of effective tax rate on the investor attraction of listed manufacturing companies in Kenya.

H₀₃ There is no statistically significant effect of tax progressivity on the investor attraction of listed manufacturing companies in Kenya.

1.5 Scope of the Study

The study scope focused on how corporate taxation affects investor decisions among listed manufacturing companies in Kenya. The research scope focused on how tax incentives, tax progressivity and effective tax rate influence investor attraction. The scope of the study focused on the 20 listed manufacturing firms in the Nairobi Securities Exchange. The theoretical scope of the survey was limited to the neoclassical investment theory and the Q theory of investment. The study relied on secondary panel data that was extracted for the period 2009-2021. This period was considered on the basis that it covers the time since the launching in 2008 of Kenyan Vision 2030 whose aim was to accelerate Kenya's transformation into a rapidly industrialising

country with manufacturing as one of its six priority sectors. Since 2008 Kenya has undergone developments of tax policy in a bid to boost the manufacturing industry in Kenya.

1.6 Significance of the Study

1.6.1 To Policy

In addition to academic contribution, this study is appropriate for policymakers in ensuring the tax policies attract investments in the manufacturing sector. Studying the effectiveness of corporate taxation structures in the country will give rise to targeted policies that support the significance of manufacturing sector in driving the economic growth of Kenya. The results of this study will also provide guidance in making decisions for policymakers especially in the context of frequent tax code changes. Policymakers can develop guidelines to be implemented in the manufacturing sector in managing their tax obligations and leverage on incentives and progressivity of the tax to improve their investment attraction.

1.6.2 To Management

The research results will also be important to executives and boards for decisions that need to be guided by best practices of managing the tax system in the country. Managers of firms should consider the tax implications of their operations. This may involve working closely with tax experts and financial advisors to optimize their tax position. This is key when making appeals to current and potential investors to raise investments in their firms that would be key in driving growth and venturing into new products.

1.6.3 To Investors

The research will be useful to shareholders and investors both current and potential ones to make informed decisions on the significance of corporate taxation in assuring them on return on their investments as well as recovery of the principal invested. The study will also help them make informed judgments regarding their investments and the investor attraction of entities in which they are shareholders.

1.6.4 To Scholars

The research will expand on the available empirical evidence on the relationship between corporate taxation and investor attraction in the manufacturing sector. The study results and recommendations will also form a core basis for future reference material for other studies focusing on the investor attraction. Future researchers will be able to make reference to this study and bridge any gaps that could have arisen from this study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presented the study's empirical review. The section begins with a theoretical review section followed by an empirical section presenting a review of the studies related to the variables adopted in this study. The study then presented a brief overview of the research gaps, the conceptual framework, and the table of operationalization.

2.2 Theoretical Review

This section discusses relevant theories explaining how tax systems influence industry attractiveness for investment. Researchers have utilized several theories to explain how tax systems influence industry attractiveness for investment. Such theories include the Capital Structure Theory, the Tradeoff Model, the Optimal Tax Theory, the Neo-classical Investment Theory, Kalecki's Theory of Taxation and the Q theory of investment. According to Moosa (2015), there is no single theory that can explain fully investments attractiveness in countries as there are variances in terms of both opportunities and barriers and investor motivations. As such investment attractiveness should employ a combination of theories that reflect variables at both firm level and country level. Two theories that formed the basis for this study are the neoclassical investment theory and the Q theory of investment and provided rationale for the relationship between corporate taxation and investor attraction.

Hecksher & Ohlin (1933) posit that the neoclassical investment theory emphasises that investments flow from countries that are capital abundant with low return on investment to those that offer higher return on investment. Hubbard and Petersen (1988) assert that Q theory is suitable to analyze the effects of taxes on capital spending. These theories aided in explaining how firm's tax burdens influence investor decisions.

2.2.1 Neoclassical Investment Theory

Neoclassical investment theory is widely used to explain the effects of taxes and investments among the various theories employed to explain FDI (Organisation for Economic Co-operation and Development (OECD), 2007b). This theory was adopted to explain investor attraction in this study as its intention is to explain specifically domestic investment and investment in general.

According to neoclassical investment theory, the ultimate goal of a firm is to increase its market value. This goal is achieved by a firm's profit maximisation. Profit is calculated as the difference between a firm's revenue and its expenses such as cost of equipment used in

production, labour costs and taxes. An investor is attracted to invest where the present value of expected future revenue is more than the costs used to generate the outputs. Jorgenson (1963) named these costs as the cost of capital and the profitability of a project as the present value of future economic benefit of an investment. Therefore, corporate taxation has an impact on investments through its impact on the cost of capital (Asih, 2020).

Cost of capital is defined as the costs incurred for use of asset over a period of time and entails the price paid for the assets plus the taxes and the opportunity cost of forgoing substitute investments. (Auerbach 1983; Rosen & Gayer 2014). The cost of capital is affected by three aspects: asset depreciation, cost of finance and taxes. Depreciation represents the decrease in value of asset over its useful life and entails increase or decrease in market value of assets. Cost of finance entails either interest when an asset is financed via debt or opportunity cost of forgoing interest income when financing is via cash. With regard to taxes, CIT reduce profits and hence increase the cost of capital. Rosen & Gayer (2014) expressed cost of capital in simple form as per the equation below:

$$C = \frac{r + \delta}{(1 - \theta) \times (1 - t)} \quad \dots\dots\dots \text{Equation 2.1}$$

C represents the cost of capital, r the cost of finance, δ the rate of depreciation, θ the CIT rate and t the individual income tax rate.

From the Equation 2.1 above we find that a higher tax rate increases the cost of capital and therefore investors are motivated to invest only when there is a higher rate of return. Tax authorities and policymakers have on this basis used tax incentives to reduce cost of capital and increase investments.

Neoclassical investment theory has however faced criticism on its assumptions that have been deemed strict and unrealistic. Its assumption that capital adjusts automatically to optimal levels has been found to be unrealistic as it does not take into account expectation, risk and uncertainty which are key features of investment decisions (Dixit, 1992). Moosa (2015) also found that studies on FDI were not able to verify the hypothesis that this theory implies whereby FDI will flow to countries with higher rates of return. Casson (2018) study also agreed with the finding that rate of return is not the only driver of FDI flows which contradicts the prediction of the neoclassical investment theory. Despite these limitations, this theory has led to the creation of many theories by relaxing its strict assumptions. This theory has also been able to clearly show the link between tax and investment and has gone on to quantify this link. Many measures of

the effect of tax burden on investment such as marginal effective tax rate and effective average tax rate have also been borne out of this theory (Dunn & Pellechio 1990; King & Fullerton 1983). Due to these facts, the neoclassical investment theory therefore provided a foundation of this study to establish the effect of corporate taxation on investor attraction (Asih, 2020).

2.2.2 Q Theory of Investment

This research analyses the effect of corporate taxation on investment destination attractiveness and Q theory of investment (Tobin, 1969) postulates that an enterprise's investment choices is a function of Q, where Q is the ratio of the market value of new additional investment goods to their replacement cost (Bartlett & Partnoy, 2020). All fluctuations in investment are related to marginal Q, which is the ratio of the market valuation to the market price of a unit of capital. Essentially, Tobin asserts that changes to the opportunities for returns influence investment decisions (Tobin, 1978). Therefore, if investors consider the value of assets to be greater than the replacement costs, then they will increase investment (Ishaq, Islam, & Ghouse, 2021). Grunfeld (1960) had, earlier proposed that owners use the firm's market value to attract potential investors and Tobin's Q relies on the concept of market value and replacement value. This theory differs from neoclassical investment theories in that it does not view investment as a function of current output, rather, a function of how the investors value the firm's growth prospects (Baddeley, 2017).

Tobin's Q is an empirical application of Keynes' (1936) theory which postulates that capital investment intensifies as the value of capital rises relative to the cost of acquisition (Abel, 2008). The market value of shares and debt determines the value of a firm's assets, and Tobin's Q is the sum of the book value of total debt and the market value of equity, divided by the book value of assets (Tobin, 1969). Chen and Li (2018) note that Tobin's Q could be used in investigating the impact of tax incentives and policies on the performance of firms. It predicts investment in environments that encourage business activity and promises significant returns. Increased regional competition and globalization has seen countries adopting different tax systems to attract investors (Peters & Taylor, 2017; Andrei, Mann, & Moyon, 2019).

Critics of Tobin's Q argue that the theory fails to accurately predict investment outcomes over longer time period, meaning that it does not accurately predict whether markets are overvalued or undervalued (Butt, Baig, & Seyyed, 2021). Further, Gugler, Haxhimusa, Liebensteiner and Schindler (2020) affirm that Q failed during the bearish markets of the 1970s, a period of uncertainty. However, according to Andrei, Mann and Moyon (2019), Tobin's Q has been

effective in predicting aggregate investment in recent years. Gutiérrez and Philippon (2017) used the theory to explain the shift of US manufacturers to cheaper markets like China which has more favourable tax structures. Kogan et al (2020) notes the Q theory of investment is the cornerstone of investment-based asset pricing, affirming that lower cost to capital attracts investment. This theory is significant to this study as it explains the approach by governments to create tax regimes (tax breaks, special economic zones) that attract investment.

The Q theory of investment supports the dependent variable which is investor attraction of manufacturing firms measured by Tobin's Q. Accordingly, among manufacturing firms, investors consider more attractive those with a higher Q value. This theory establishes a relationship between firm returns and attractiveness, making it essential when trying to establish a relationship between corporate taxation, firm value and investor attraction.

2.3 Empirical Review

This section presents a review of the studies related to variables adopted in this study that guide the structure of the study. It evaluates previous research conducted on the relationship between tax policy and investor attraction. The study then presents a brief overview of the research gaps that was the basis of the conceptual framework.

2.3.1 Tax Incentives and Investor Attraction

In a study on the assessment of effects of tax policy on FDI in Southeast Asia, (Asih, 2020) sought to investigate the impact of tax incentives on FDI. The study examined two types of tax incentives; tax holiday a profit-based incentive and investment allowance a cost-based incentive and were measured as the as the average of available tax incentives for the period under study. The study employed panel data for the period of 1996-2017 regressed using the FEM and REM regression method. The results were contrary to the widely held view that tax incentives are positively related to FDI. The coefficients of regression for tax holiday and investment allowance were found to be negative and conclusion was that tax incentives may not attract FDI.

Bobenič Hintošová, Sudzina and Barlašová (2021) carried out a study in Slovakia to investigate the effects of investment incentives on FDI inflows and on selected macroeconomic variables. The analysis collected data reported between 2002 and 2019 and applied ordinary least square (OLS) regression analysis as the primary methodology. The analysis showed that while financial incentives such as rent and tax holidays had a direct impact on FDI inflows, fiscal incentives had the opposite effect. FDI inflows had an indirect impact on unemployment

reduction. Conclusions were that foreign investors value financial incentives such as grants and subsidies since these are usually provided at the beginning or during the investment process. Fiscal incentives were reported to be less attractive since they are associated with difficulties administering the incentives, misallocation of resources, and potential corruption.

Appiah-Kubi, et al. (2021) utilized unbalanced panel data reported between 2000 and 2018 from forty countries in Africa to investigate the influence of tax incentives on FDI in African countries. Specific objectives were to determine whether tax incentives such as corporate tax rate, tax withholding, tax holiday, and tax concessions attract foreign investors. Regression analysis revealed that tax withholding and tax holidays have a positive effect on FDI inflows. Company tax rate had a negative and significant effect on FDI, while tax concessions have a negative and insignificant relationship with FDI inflows. Country-level factors such as political stability, peace, trade openness, infrastructural development, GDP and corruption rate were all determined to significantly influence investment inflows.

There are studies done in Kenya on the effect of tax incentives on FDI. Thuita (2017) sought after the effect of specific tax incentives, tax holidays and capital deductions, on FDI attraction and retention in Kenya's export processing zones. A descriptive survey research design was used and questionnaires utilised to obtain data from 72 employees. The study concluded that tax incentives greatly influenced the attraction of FDI. Kamau (2018) investigated the effect of tax incentives on profitability of quoted Kenyan agricultural firms. Specific focus was on the effect of effective tax rate on profitability, its relationship with long-term solvency and its effect on share performance. A mixed research design was utilized and the study targeted seven firms' data reported between 2011 and 2015. Regression analysis revealed that effective tax rate had little correlation with the firm's performance.

2.3.2 Tax Progressivity and Investor Attraction

Linhartová (2018) sought after the determinants of FDI inflows into the Czech Republic. The study specified on investigating inflows between 1998 and 2015 and utilized panel data collected from published financial reports. Analysis involved multiple regression analyses. From the analysis, it was determined that the rate fixed upon companies' income significantly determine the volume of investment inflows. Investment incentives did not show a significant effect on FDI since most of the incentives were already in effect in most of Europe. The study showed that some firms exited the market when the country increased corporate tax by 1%, concluding that introducing a progressive tax system, or increasing company tax rate would

reduce the attractiveness of the country. Other determinants of FDI inflows were spending on science and research and GDP, which had a positive influence, while the Corruption Perceptions Index reduced destination attractiveness.

Chisakulo and Kambani (2017) examined the Zambian tax system to determine its effect on the attractiveness of the country's mining industry. A qualitative approach was utilized and the researchers collected data from both primary and secondary sources. The study compares Zambia with ten other copper producing countries and developed a stylised copper mine project to analyse the tax system's competitiveness in comparison to different taxation jurisdictions. Analysis revealed that the corporate income tax and mine royalties tax employed in Zambia were similar to those applied in other regions. The study showed that progressive tax systems are not attractive to investors and that the country had employed a regressive system comprising of royalty rates, operating costs and commodity price assurances.

Asih (2020) sought to examine the effect of CIT on FDI in Southeast Asia by employing empirical estimations of both Statutory Tax Rate (STR) and EATR as proxies of CIT. The study found that CIT has a positive and a significant effect on FDI in contrast to neoclassical investment theory and empirical evidence from investor surveys. The conclusion from this finding was that lowering CIT rate may not help attract more FDI into Southeast Asia. CIT's statistical significance as a determinant of FDI was however considered inconclusive.

2.3.3 Effective Tax Rate and Investor Attraction

Nigeria's Ese (2021) employed a quantitative research design method and adopted an ex-post-facto research design to investigate the effect of the country's effective tax rate on the value of listed commercial banks. The study used unbalanced panel data collected from annual reports and accounts published between 2004 and 2018. Tobin's Q was utilized as the proxy for firm value and the unbalanced panel fixed effects and random effects panel Estimated Generalized Least Squares (EGLS) regressions were utilised to investigate the extent of the study variables' relationship. Swamy and Arora estimates were applied as weights. Analysis revealed a direct and significant effect of ETR on Tobin's Q, confirming that investors can predict a firm's value by following ETR developments since lower ETR increases share prices among Nigerian banks. Leverage, on the other hand, had an insignificant impact.

In Tunisia, Naoui and Kasraoui (2020) examined the impact of tax reforms on firm-specifics and corporate ETR. The study specified on the pre-reform (before 2013) and on the post reform (after 2014) period. Panel data reported between 2010 and 2016 from 16 publicly-listed

companies were utilized and regressions employed on the data collected. The analysis revealed that tax reforms had seen an increase in firms' inventory, size and research and development investment. However, lowered corporate taxes had an insignificant effect on firms characteristics. The study called for more reduction to the statutory rate to realize the benefits of low tax on firm growth.

Melo-Becerra, Mahecha and Ramos-Forero (2021) investigated the relationship between frequent tax reforms and corporate investments with a focus on the Colombian government, which has instituted at least one reform after three years. The study estimated the effect of taxation on investors' cost of capital by computing the METR at the firm level then estimating the impact of the cost of capital on investment. An unbalanced panel data structure reported between 2005 and 2015 was utilized. Financial statements and corporate tax reports provided data sources. Two-stage least squares (2SLS) regression analysis was employed revealing that tax reforms significantly impact investor decisions. The analysis revealed that lower corporate taxes, tax deductions, and exemptions all increased corporate investment depending on individual firms' tax burden, firm characteristics and tax benefits received.

2.4 Summary of Literature and Research Gap

Studies from the empirical review section show that investment decisions can be influenced by various factors, not just the tax system. Although the studies all show a significant influence of tax policy on investor attraction, whether positive or negative, various gaps were noted, and it is these gaps that motivate the current study.

The studies by Asih (2020), Appiah-Kubi, et al. (2021) and Linhartová (2018) identified gaps related to the dataset and variables utilised. These studies employed aggregate-level FDI data that may not be appropriate as it ignores the heterogeneity in tax responsiveness which vary across industries and firms. As such a study on investor attraction by industry-level and firm-level may better capture the effect of taxation. This study aims to fill these gaps by employing firm-level data that are better capture the asymmetric effect of corporate taxation on investments. Asih (2020) also found that CIT as an explanatory variable of FDI in terms of statistical significance is inconclusive. The effectiveness of a tax incentive can be assessed through their effect on ETR. The variables tax progressivity and ETR are therefore better measures of the tax burden as explanatory variables of investor attraction and were utilized in our study.

Review of literature also found gaps related to the empirical approaches employed. The study by Bobenič Hintošová, Sudzina and Barlašová (2021) utilised the OLS regression analysis which does not consider different characteristics of cross-section units in a dataset hence does not allow heterogeneity across cross-section units and time dimension. In case of Kamau (2018) study, due to the small sample size of only seven firms in one sector over a period of five years, missing data may affect the results of empirical estimations. In our study, panel data was used as opposed to time-series and cross-section data which may not detect, identify, and measure relationships among variables. Panel data over a longer period provided a large dataset which enabled this study to decrease the possibility of high collinearity among variables, increase degree of freedom and improve the efficiency of econometric estimations (Hsiao, 2014). This study also utilised the FEM and REM regression techniques which are considered a better approach considering the heterogeneity of the sample.

Table 2.1 Summary of Literature and Research Gap

Author	Title	Findings	Gaps	How the study fills the gap
Asih (2020)	Assessing the Effects of Tax Policy on Foreign Direct Investment in Southeast Asia	Tax incentives may not attract FDI. CIT has a positive and a significant effect on FDI	The study employed aggregate-level FDI data that may not be appropriate as it ignores the heterogeneity in tax responsiveness which vary across industries and firms.	This study filled this gap by employing firm-level data that better capture the asymmetric effect of corporate taxation on investments.
Bobenič Hintošová, Sudzina and Barlašová (2021)	Direct and indirect effects of investment incentives in Slovakia	The analysis showed that while financial incentives such as rent and tax holidays had a direct impact on FDI inflows, fiscal incentives had the opposite effect	The study utilised the OLS regression analysis which does not consider different characteristics of cross-section units in a dataset hence does not allow heterogeneity across cross-section units and time dimension.	To bridge this gap, this study utilised panel data and the FEM and REM regression techniques which are considered a better approach considering the heterogeneity of the sample.
Appiah-Kubi, et al. (2021)	Impact of Tax Incentives on Foreign Direct Investment:	Company tax rate had a negative and significant effect on FDI, while tax concessions have a	The study employed aggregate-level FDI data that may not be appropriate as it ignores the	This study filled this gap by employing firm-level data that are better capture the asymmetric effect of

	Evidence from Africa	negative and insignificant relationship with FDI inflows.	heterogeneity in tax responsiveness which vary across industries and firms.	corporate taxation on investments.
Kamau (2018)	Effect of Tax Incentives on Financial Performance of Quoted Agricultural Firms in Kenya for the Period 2011-2015	Effective tax rate incentives had little correlation with the firm's ROA and ROE, failing to attract increased investment	Due to the small sample size of only seven firms in one sector over a period of five years, missing data may affect the results of empirical estimations.	To fill this gap, this study utilised panel data over a longer period that provided a large dataset which enabled this study to decrease the possibility of high collinearity among variables, increase degree of freedom and improve the efficiency of econometric estimations.
Linhartová (2018)	Factors Influencing The Foreign Direct Investment Inflow In The Czech Republic	The study concluded that introducing a progressive tax system, or increasing company tax rate would reduce the attractiveness of the country	This study only used corporate tax rate as the variable to measure tax policy and hence not comprehensive. Statistical significance of CIT as an explanatory variable is inconclusive.	To fill this gap, the variables tax incentives, tax progressivity and ETR which are better measures of the tax burden as explanatory variables of investor attraction were utilized in our study.
Chisakulo and Kambani (2017)	Competitiveness Evaluation of the Zambian Mine Taxation System	The study showed that progressive tax systems are not attractive	This study only investigated investment attraction in the mining industry only and employed a qualitative approach.	To fill this gap, this study employed a quantitative approach on Kenya's manufacturing industry.
Ese (2021)	Effective Tax Rate And Firm Value Of Listed Banks On Nigerian Stock Exchange	Analysis revealed a direct and significant effect of ETR on Tobin's Q, confirming that investors can predict a firm's value by following ETR developments since lower ETR increases share	The study utilized an ex-post facto research design and utilized unbalanced panel data from banks; the current study investigated manufacturing firms in Kenya.	To fill this contextual gap, this study utilised panel data from listed manufacturing firms in Kenya.

		prices among Nigerian banks		
Naoui and Kasraoui (2020)	Post Tax Reform and Corporate Effective Tax Rate: Evidence from Tunisia	Tax reforms had seen an increase in firms' inventory, size and research and investment	This was a Tunisian based study presenting a geographical gap; the current study addressed this investigation in relation to the Kenyan tax system.	To fill this geographical gap, this study utilised panel data from listed manufacturing firms in Kenya.
Melo-Becerra, Mahecha and Ramos-Forero (2021)	Corporate taxation and investment: Evidence from a context of frequent tax reforms	Lower corporate taxes, tax deductions, and exemptions all increased corporate investment	The study done in Colombia where the tax structure differs significantly from Kenya's tax structure presenting a contextual gap.	To fill this contextual gap, this study employed Kenya's tax structure.
Helcmanovská and Andrejovská (2021)	Tax Rates and Tax Revenues in the Context of Tax Competitiveness.	Analysis revealed that statutory and average effective tax rate have an insignificant impact on business investment	This study compared revenue generation from old and new EU member states where the tax structure differs significantly from Kenya's tax structure.	To fill this contextual gap, this study employed Kenya's tax structure.

Source: Researcher (2023)



2.5 Conceptual Framework

Kothari (2014) defines a conceptual framework as a hypothesized model identifying the model under study and the relationship between the dependent and independent variables. The conceptual framework depicts the interaction between corporate taxation and investor attraction of listed manufacturing companies. The independent variables tax incentives, tax progressivity and effective tax rate are the proxies for corporate taxation so as to examine the robustness of the finding and will capture better the effect of taxation. The dependent variable, Tobin's Q was utilized as the measure of investor attraction. The relationship between corporate taxation and investor attraction is dynamic in nature and subject to a host of other influences. As such, we also control for a host of firm level factors; firm size, firm age and leverage and market level factors; economic growth that may have a significant impact on investor decisions.

Independent Variables

Tax Incentives:

- Number of tax incentives a firm qualifies for

Tax progressivity:

- The ratio of change in the average tax rate to the change in income

Effective Tax rate:

- Actual income tax expenses incurred by a firm as a percentage of accounting profit before corporate tax expense

Dependent Variable

Investor Attraction:

- Tobin's Q

Control variables:

- Firm Size
- Firm Age
- Leverage
- Economic growth

Figure 2.1 Conceptual Framework

Source: Researcher (2023)

2.6 Discussion of the Variables

The above framework captures how the corporate taxation proxies; tax incentives, tax progressivity and effective tax rate influence the investor attraction in listed manufacturing firms in Kenya. Tax incentives has been employed as a proxy for corporate taxation in this study. Tax incentives are widely used by policymakers to attract investments. Tax incentives are either profit-based incentives or cost-based incentives. Profit-based incentives reduce tax liability through reduction of taxable profits while cost-based incentives reduce tax liability by lowering cost of capital. The number of profit-based tax incentives that a firm qualifies for has an impact on the firm's net profit growth and return on assets. Likewise, the number of cost-based tax incentives a firm qualifies for has an impact on the firm's sales growth and opportunity cost of capital expenditure. With the annual changes in tax code through the annual finance bill that has seen tax incentives been dropped or introduced, this measure was instrumental in establishing the impact of tax changes on investor attraction. This study examined the number of tax incentives a firm qualifies for each year for the period under study and obtained this data from relevant tax regulations (Cheong, Lee, & Weissmann 2020;Asih 2020).

Tax progressivity calculation was adapted from Pigou (1960) and is computed using the Average Rate Progression (AP) model which is defined as the ratio of the change in the average tax rate to the change in income. Tax progressivity is therefore computed as:

$$AP = \text{Change in Average Tax Rate} / \text{Change in Income} \dots\dots\dots \text{Equation 2.2}$$

For AP=0 represents proportional tax structure, AP<0 represents regressive tax structure and AP>0 represents progressive tax structure (Govori, 2015;Gerber, Klemm, Liu, & Mylonas, 2018).

Average tax rate is the tax paid by a firm as a percentage of the chargeable income for a specific year. According to literature, tax progressivity may reduce the incentives businesses have to continue operating or encourage business expansion if the tax differentials lower the opportunity cost of capital expenditure (Cheong, Lee, & Weissmann, 2020). ETR is the corporate taxation proxy that summarizes the interactions of various tax regulations on an investment (De Mooij & Ederveen, 2003). ETR can be categorised into two: backward-looking ETR and forward-looking ETR. Backward-looking ETR is computed using actual taxes paid on income already earned from existent capital. Forward-looking ETR on the other hand is computed using hypothetical investment projects and assumptions for profitability, financing

and assets. Forward-looking ETR calculation is therefore rather complex and may vary based on different assumptions. Backward-looking ETR advantage therefore lies in its simplicity in calculation and availability of data. As such, this study employed backward-looking ETR derived from the sampled firm's micro data which includes their tax returns and financial statements (Asih, 2020).

The study's dependent variable entails the measurement of a manufacturing firm performance from an investment attraction viewpoint. Tobin's Q was the measure of investor attraction. Tobin's Q calculation is adapted from Chung & Pruitt (1994) and is computed as:

$$Q = (TE + SF + DEBT) / TA \dots\dots\dots \text{Equation 2.3}$$

where TE is total equity of the firm, SF is the shareholder funds invested in the firm, DEBT is the firm's total debt and TA is the firm's total asset value.

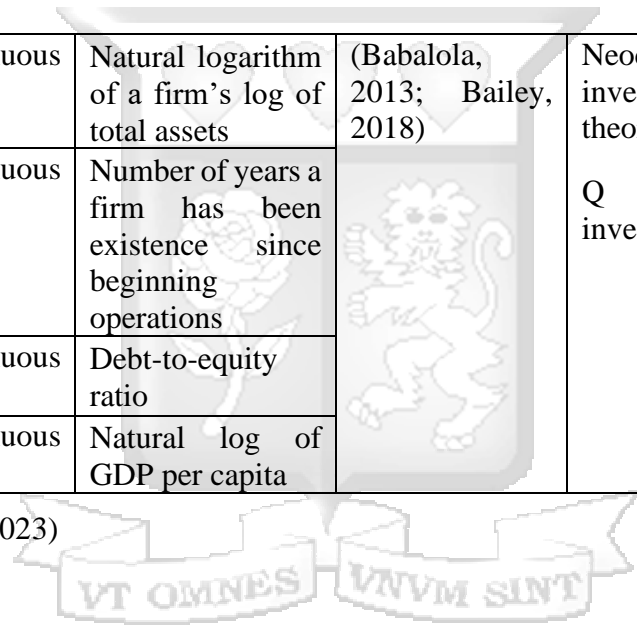
We predict that conducive corporate taxation attracts more investors reducing the opportunity costs of capital expenditure and allowing greater earnings retention. This relationship, however, is dynamic in nature and subject to a host of other influences. As such, we also control for a host of firm level and market level factors that may have a significant impact on investor decisions.

2.7 Operationalisation of the Study Variables

The variables are operationalized as shown below:

Table 2.2 Operationalization of variables

<i>Variable</i>	<i>Type</i>	<i>Measurement</i>	<i>Supporting literature</i>	<i>Supporting theory</i>
<i>Independent variables</i>				
Tax incentives	Continuous	Number of tax incentives a firm qualifies for	(Cheong, Lee, & Weissmann 2020;Asih 2020; Appiah-Kubi, et al. 2021).	Neoclassical investment theory
Tax progressivity	Continuous	Ratio of the change in the average tax rate to the change in income	(Govori, 2015;Gerber, Klemm, Liu, & Mylonas, 2018).	Neoclassical investment theory

Effective tax rate	Continuous	Actual income tax expenses incurred by a firm as a percentage of accounting profit before corporate tax expense	(Naoui and Kasraoui 2020; Asih 2020)	Neoclassical investment theory
<i>Dependent variable</i>				
Investor attraction	Continuous	Tobin's Q	(Ese 2021; Cheong, Lee and Weissmann 2020)	Neoclassical investment theory Q theory of investment
<i>Control variables</i>				
Firm Size	Continuous	Natural logarithm of a firm's log of total assets		Neoclassical investment theory Q theory of investment
Firm Age	Continuous	Number of years a firm has been existence since beginning operations		
Leverage	Continuous	Debt-to-equity ratio		
Economic Growth	Continuous	Natural log of GDP per capita		

Source: Researcher (2023)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The methodology section sets out the various procedures that the researcher employed to assist in achieving the research objectives. It is a systematic detailing of the approach that the researcher used to solve the research problem (Newing, 2011). The research design, population, sampling technique, sample size, instruments, pilot test and data analysis methods are illustrated in this chapter. It concluded with the ethical considerations.

3.2 Research Philosophy

The study followed an ontological stance with a positivism perspective. According to Saunders, Lewis, & Thornhill (2009), “ontology refers to assumptions about the nature of reality. Ontological assumptions shape the way in which one sees and studies their research objects”. Ontological assumptions seek to answer the question ‘what is the nature of reality encountered in the research?’. Saunders, Lewis and Thornhill (2009), go on to describe positivism as “a philosophical stance of the natural scientist that entails working with an observable social reality to produce law-like generalisations which promises unambiguous and accurate knowledge”. The emphasis on a positivist approach is to yield pure and unbiased data and facts uninfluenced by human interpretations. This fits into the study as it sought to address the nature of reality of the relationship between corporate taxation and investor attraction and therefore utilize the positivist approach in ascertaining this relationship. By analysing data collected from financial information of listed manufacturing firms in Kenya, the positivist approach guides the way in which the data will be analysed to give relevant meaning to the finding.

3.3 Research Design

Orodho (2003) defines research design as the scheme outline or structure that guides the research process. All elements are embedded on the research design, and it enables the researcher to answer the research questions and respond to questions through data driven proxies. This study used a descriptive correlational research design to establish the effect of corporate taxation on investor attraction using evidence from listed manufacturing companies in Kenya. Burns and Groove, (2014) posit that adopting a descriptive research design allows the study to establish the direction and effect that exists between two variables. By using secondary data collected, this design is key in analysing how tax incentives, tax progressivity and effective tax rates affect investor attraction thereby enabling the study correlate at least two or more variables. Cheong, Lee, & Weissmann (2020) employed this design successfully in their

study on the effect of credit access and tax structure on the performance of Malaysian manufacturing SMEs.

3.4 Population of the Study

Burns and Groove, (2014) define a population as all the elements that meet the criteria for being included in a study. According to Orodho (2003) a population refers to all the elements that a researcher can make inferences on. The population for this study included all the firms that are listed at the NSE that qualify as manufacturing companies. There are 20 manufacturing firms that are listed in the NSE which formed the unit of analysis for the current study as shown in Appendix I (Nairobi Securities Exchange, 2022). Due to the limited number of listed manufacturing firms, a census study was carried out. Census is suggested by several researchers as appropriate where the population is fairly negligible and readily available (Saunders et al, 2019). The listed firms trading on the securities exchange constitute some of the largest manufacturing entities within the country. Further, due to their publicly traded status they can be an ideal benchmark in examining whether corporate taxation does influence the investor attraction among listed entities in the country.

3.5 Data Collection Methods

Coopers and Schindler (2011) note that data collection involves all the procedures that are applied in obtaining all relevant information necessary in solving the research problem. The study relied on annual panel data that was collected from the audited financial statements of the listed manufacturing firms in Kenya to meet the objectives of the study. Data on tax incentives was collected from Kenya Revenue Authority and the Annual Finance Bills. The use of secondary data for the study is informed by the nature of the study variables and the conceptualizations which dictated the measurement of the individual variables. The panel data was extracted annually for the period 2009-2021. The period for the study is consistent with studies by Asih (2020) and Naoui & Kasraoui (2020) which utilized time periods of more than five years.

3.6 Data Analysis

Data analysis is the science of obtaining trends, patterns and information gathered from a set of data (Orodho, 2003).

3.6.1 Descriptive Statistics

The quantitative data collected for the study was input into a statistical analysis tool in order to generate descriptive and inferential statistics. It is essential to establish the characteristics of the data through the statistics of the data set such as mean, median maximum, minimum and standard deviation.

3.6.2 Correlation Tests

After examining the descriptive statistics, the subsequent step is to examine the correlation among the explanatory variables. According to Gujarati (2003b), when there are variables that are highly correlated, regression parameters become less precise, a problem known as multicollinearity. High multicollinearity results in large variance and standard errors and increases the difficulty of the regression to assess effect of independent variable on the dependent variable. Therefore, pairwise correlation is examined prior to proceeding to regression analysis.

3.6.3 Unit Root Tests

In order to employ the appropriate regression techniques, the stationarity of the variables under study was established. Asih (2020) posits that this procedure is vital due to the characteristics of a dataset which comprises a number of cross-section units with considerable time-series similar to the data in this study. Unit root tests were therefore performed to establish the order of integration of the variables of the study. The study performed the Augmented Dickey Fuller test for unit root test within the data employed for the research.

3.6.4 Econometric Model

The study selected the most appropriate panel data regressions model between the Fixed Effect Model (FEM) and Random Effect Model (REM). The study employed the econometric model below to regress the dependent variable on the independent variables:

$$\text{Investor Attraction}_{i,t} = \beta_0 + \beta_1 \text{Tax incentives}_{i,t} + \beta_2 \text{Tax progressivity}_{i,t} + \beta_3 \text{ETR}_{i,t} + \beta_4 \sum_{j=1}^n \text{Control}_{j,i,t} + \varepsilon_{it} \dots \dots \dots \text{Equation 3.1}$$

where:

Investor Attraction_{i,t} = the Tobin's Q of firm *i* at year *t*

β₀ = the constant

Tax incentives_{i,t} = the number of tax incentives firm *i* qualified for in year *t*

Tax progressivity $_{i,t}$ = firm i 's tax progressivity in year t

ETR $_{i,t}$ = firm i 's effective tax rate in year t

Control $_{j,1,t}$ = the vector of control variables

ε_{it} = Error term at time t

The control variables include firm size, firm age, leverage and economic growth. Firm size is identified by the natural logarithm of a firm's log of total assets. Firm age is defined as the number of years a firm has been existence since beginning operations. Leverage is defined as the debt-to-equity ratio. Economic growth is defined as the natural log of GDP per capita.

3.6.5 Diagnostic Tests

Conventional panel data regressions models such as pooled Ordinary Least Squares (OLS), Fixed Effect Model (FEM) and Random Effect Model (REM) can be employed to answer the research questions. This is accompanied by an analysis of the residuals to establish the goodness of fit of the model. To choose the most appropriate method for the study, FEM and REM were all be performed, and relevant tests was utilised to select the model.

The following test was performed to establish the most appropriate regression approach. A comparison of the efficiency of either FEM or REM was performed using the Hausman test. The aim is to establish whether a firm's unobserved heterogeneity is not correlated with the regressors which is required for REM. If we fail to reject the null hypothesis, the indication is that the unobserved heterogeneity which is captured by the error term is correlated with the regressors and as such FEM is more appropriate.

When the FEM model was chosen as the most appropriate approach, an evaluation of the goodness of fit was performed. A residual analysis to evaluate the properties of the residuals was carried out which entails the stationarity and cross-section independence. Cross-section dependence may lead to bias estimators due to the correlation among the cross-section units. Unit root tests was performed to determine stationarity and heteroskedasticity likelihood ratio test was used to check the problem of heteroskedasticity (Pesaran, 2021). Also, serial correlation/autocorrelation was tested using the Durbin-Watson test.

3.7 Research Quality

The study addressed the validity, reliability and objectivity of the research as follows:

3.7.1 Reliability and Objectivity of the Research

Reliability is conducted to measure the degree to which research instruments yield consistent results over time (Mugenda & Mugenda, 2003). It is therefore a test of consistency in findings when the research is replicated using similar collection methods and analytical techniques. The reliability of this study is addressed by sourcing data from credible sources which include the Nairobi Securities Exchange, Kenya Revenue Authority and Kenya Association of Manufacturers. The analytical technique is also in line with previous studies including Asih (2020) and Cheong, Lee, & Weissmann (2020).

3.7.2 Validity

Saunders, Lewis, & Thornhill (2009) postulates that validity is constituted of three forms; construct, internal and external validity. Construct validity refers to the extent to which the research measures achieve the objectives. Internal validity is shown when the research establishes a relationship between variables. External validity refers to research findings yielding consistent results by another researchable. This study's validity questions are addressed through the appropriate and adequate diagnostic tests in order to avoid any possibilities of a Type I error occurring.

3.8 Ethical Considerations

The survey applied for ethical clearance from the Institutional Review Board of Strathmore University before conducting the research. Further, the extracted research data was utilized for academic purposes and will not be distributed to any unauthorized parties. The study obtained research licence from the National Commission for Science Technology and Innovation (NACOSTI) before conducting the study. Lastly, the study ensured that all quoted materials are properly referenced within the research work.

CHAPTER FOUR: PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

The fourth chapter presented the findings of the analysis of the extracted research data from the listed manufacturing firms in Kenya. The focus of the chapter was on the quantitative analysis of the extracted data using descriptive statistics, correlation, and panel regression analysis. Further, diagnostic tests were applied to ensure the data meets the threshold for the stated techniques of analysis.

4.2 Descriptive Statistics

In this section, the descriptive results for all variables were presented. Specifically, mean, maximum, minimum, standard deviation were the key elements that were interpreted to enhance understanding of the results. The results are presented in Table 4.1.

Table 4.1 Descriptive analysis

	Tobin's Q	ETR	Tax incentives	Tax Progress.	Firm Age	Firm Size	GDP	Leverage
Mean	0.736	0.291	5.876	0.968	75.748	9.667	10.846	1.704
Median	0.726	0.288	5.000	1.069	69.000	9.742	10.846	0.109
Maximum	1.715	0.399	11.000	7.012	152.000	11.000	11.043	81.359
Minimum	0.076	0.231	3.000	-9.596	24.000	7.701	10.627	0.000
Std. Dev.	0.167	0.035	2.310	2.355	28.881	0.697	0.132	8.150
Sum	178.18	70.47	1422.00	234.22	18331.00	2339.49	2624.74	412.36
Sum Sq. Dev.	6.74	0.29	1286.28	1336.28	201023.6	116.99	4.18	16009.45
Observations	242	242	242	242	242	242	242	242

Source: Research Data (2023)

The analysis revealed that Tobin's Q (the measure of investor attraction) had a mean score of 0.736 with a small variability score of 0.167 over time. Meanwhile, the maximum Tobin's Q for all the firms was 1.715 while the minimum was 0.076. This means that some firms highly attracted investors while others did not. It was again found that, the mean score for effective tax rate for all the Kenyan listed manufacturing firms was 0.291 with a small variability of 0.035 over time (standard deviation). This was in tandem with the regulatory average company tax prescribed in the country. The maximum and minimum for effective tax rates was 0.399 and 0.231. The results indicated that on average the sampled listed firms qualified for 6

incentives with a maximum of 11 incentives and a minimum of 3 incentives accorded by the tax authority. Additionally, tax progressivity was established to have a mean score of 0.968 while varying at 2.355 over time. The maximum and minimum scores for tax progressivity for all the firms were 7.012 and -9.596, respectively. This could mean that, tax progressivity for some firms was poor as depicted by the negative results.

Analysis of the firms' characteristics revealed that the oldest firm was found to have existed for 152 years while the youngest firm was 24 years with a mean score of 75.748 varying at 28.881 over time. Regarding firm size, the study found that the firms had a mean score of 9.667 (natural log) with a variability of 0.697 while the maximum and minimum values were 11.001 and 7.701, respectively. Concerning GDP, the study established that the variable had a mean of 10.846 with a variability of 0.132 over time whereas, the maximum and minimum values were 11.043 and 10.627, respectively. The mean leverage for all the firms was 1.704 with a large standard deviation of 8.150 while maximum and minimum scores were 81.359 and 0.000, respectively. This means that, some firms were considered a risky investment by investors because of the high ratios.

4.3 Diagnostic Analysis

The research conducted various diagnostic tests to check on the appropriateness of the extracted data for utilization in inferential analysis.

4.3.1 Unit Root Tests

The survey applied unit root tests to check the stationarity of the study variables. The study applied the augmented dickey fuller tests and findings are shown in Table 4.2 below.

Table 4.2 Stationarity test

Null Hypothesis: Variable has a unit root

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes individual unit root process)				
ADF - Fisher Chi-square	88.306	0.000	20	242

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

Source: Research Data (2023)

As indicated in Table 4.2, the summarized unit root test for the variables found p-values were less than 0.05. Therefore, data are stationary at 5 per cent level of significance, meaning the null hypothesis of non-stationarity is rejected. The findings above affirmed there was no presence of unit root and so panel regression models could be employed in the study.

4.3.2 Correlation Analysis

The research conducted correlation analysis to examine the correlation among explanatory variables and the findings are shown in Table 4.3 below.

Table 4.3 Correlation test

	Tobin's Q	ETR	Tax progress.	Tax incent.	Firm size	Firm age	Leverage	GDP
Tobin's Q	1							
ETR	-0.406	1						
Tax progress.	0.684	-0.410	1					
Tax incent.	0.050	-0.010	0.064	1				
Firm size	-0.087	-0.156	-0.081	-0.076	1			
Firm age	-0.087	0.060	0.034	0.267	-0.142	1		
Leverage	0.032	-0.032	0.164	-0.056	-0.369	0.159	1	
GDP	0.050	0.010	0.063	0.780	0.033	0.146	-0.143	1

Source: Research Data (2023)

The results presented above shows that, effective tax rate had a negative association with investor attraction (coefficient = -0.406). Firm age also had a negative association with investor attraction (coefficient = -0.087). Further, firm size was established to have a negative association with investor attraction (coefficient = -0.087). From the results, it can be said that a decrease in effective tax rate, firm age, and firm size could result in an increase in investor attraction. However, GDP, leverage, tax incentives, and tax progressivity had a positive association with investor attraction as represented by coefficients of 0.050, 0.032 and 0.684, respectively. It can thus be said that as these variables increase, investor attraction increases.

Even though multicollinearity is a common problem in a regression, there is no standard critical value to identify severe multicollinearity. Thus, most studies generally rely on a rule of thumb in determining the presence of high multicollinearity among variables. Gujarati (2003b) and Kennedy (2008), for example, suggest a value of pairwise correlation higher than 0.8 (in

absolute value) as an indication of high multicollinearity. Following this rule of thumb, no variables are found to be highly correlated.

4.3.3 Hausman Specification Test

The Hausman test is used to compare two different estimates of the model parameters. Through employing the test, one can determine whether to apply random effects or fixed effects analysis in the panel regression. The specification tests for the two models are presented in this section.

Table 4.4 Hausman specification test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	8.224	6	0.222

Period random effects test comparisons:

Variable	Fixed	Random	Var (Diff.)	Prob.
Effective Tax Rate	-0.803	-0.781	0.001	0.562
Tax Incentives	0.013	0.005	0.000	0.054
Tax Progressivity	0.044	0.044	0.000	0.394
Firm Age	-0.001	-0.001	0.000	0.035
Firm Size	-0.025	-0.026	0.000	0.117
Leverage	-0.002	-0.002	0.000	0.091

Source: Research Data (2023)

The aim of the test is to establish whether a firm's unobserved heterogeneity is not correlated with the regressors which is required for REM. From the Hausman test table 4.4 above, the conclusion is that the null hypothesis of "a firm's unobserved heterogeneity is correlated with the regressors " is not rejected. This can be seen from the value of the chi-square of the Hausman statistics of 0.222 which is greater than 0.05. The indication is that the unobserved heterogeneity which is captured by the error term is correlated with the regressors and as such FEM is more appropriate.

4.3.4 Heteroscedasticity Test

Heteroscedasticity happens when the regression residuals are heteroskedastic. That is, for all observations, the residual variance is not constant. The study adopted the Likelihood Ratio to check the problem of heteroskedastic in the applied research models.

Table 4.5 Heteroscedasticity test

Heteroscedasticity LR Test			
	Value	df	Probability
Likelihood ratio	57.007	20	0.000

Source: Research Data (2023)

The analysis above showed that the residuals are homoscedastic. This is so because the likelihood ratios' probability score for heteroscedasticity is 0.000. The results mean that the requirement for constant variance was not violated.

4.3.5 Cross-sectional Dependence Test

The research employed LM statistic by Breusch and Pagan for testing cross-section panel dependence. This test assisted establishing if the null vector is sufficiently near zero or not. The findings are indicated in Table 4.6 below.

Table 4.6 Cross-sectional dependence test

Null hypothesis: No cross-section dependence (correlation) in residuals

Test	Statistic	d.f	Prob.
Breusch-Pagan LM	215.301	190	0.101

Source: Research Data (2023)

The findings above showed that the probability is 0.101 >.05. Consequently, null hypothesis is not rejected and hence there is no correlation among the cross-section units.

4.3.6 Autocorrelation Test

The research applied correlation tests to examine correlation of error terms across time periods. The assumption of independence of observations (autocorrelation) was tested using the Durbin-Watson test for autocorrelation. The findings are shown in Table 4.7 below.

Table 4.7 Autocorrelation test

Autocorrelation Test: Durbin-Watson

DW-statistic	1.585
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Source: Research Data (2023)

The findings above showed D-W statistic that were within the recommended range of 1.5-2.5 which implied there was no serial correlation within the model hence the panel estimation can be utilized to determine the interaction between the study variables.

4.4 Panel Regression Analysis

Based on the results of the Hausman specification test presented in Table 4.4, the study adopted fixed effects model in conducting panel regression for the dependent variable and results are shown below. The regression model estimated the effect of corporate taxation and the control variables on the Tobin Q of the manufacturing companies listed on the NSE and findings are presented in Table 4.8.

Table 4.8 Panel regression corporate taxation on investor attraction (Tobin Q)

Dependent Variable: TOBINS_Q

Cross-sections included: 20

Total panel (unbalanced) observations: 242

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.988	4.095	-0.241	0.809
Effective Tax Rate	-0.694	0.288	-2.413	0.017
Tax Incentives	-0.009	0.008	-1.252	0.212
Tax Progressivity	0.040	0.004	10.131	0.000
Firm Age	-0.002	0.019	-0.055	0.956
Firm Size	0.033	0.033	0.998	0.319
GDP	0.158	0.507	0.311	0.756
Leverage	-0.001	0.001	-0.617	0.538
R-squared	0.572	Mean dependent var		0.736
Adjusted R-squared	0.5204	S.D. dependent var		0.167
S.E. of regression	0.116	Akaike info criterion		-1.369
Sum squared resid	2.884	Schwarz criterion		-0.979
Log likelihood	192.601	Hannan-Quinn criter.		-1.212
F-statistic	11.056	Durbin-Watson stat		1.585
Prob(F-statistic)	0.000			

Source: Research Data (2023)

The above panel regression model evidenced by the $F = 11.056$, $\text{Prob} > F = 0.000 < .05$ showed there was a statistically significant relationship between corporate taxation, firm size, firm age, GDP, leverage and the investor attraction (Tobin's Q) of listed firms in Kenya. The R square was found to be 0.572. This means that the variables used in the study varies from the investors' attraction at about 57.2% hence a good fit. The rest of the percentage can be accounted for by other variables not included in the study.

H₀₁ *There is no statistically significant effect of tax incentives on the investor attraction of listed manufacturing companies in Kenya.*

The results revealed that the number of tax incentives a firm qualifies for had a negative and non-significant relationship with Tobin Q of listed manufacturing companies in Kenya. This is shown by a coefficient of -0.009 and a p value of 0.212. The coefficient -0.009 can be interpreted to mean that an increase in number of tax incentives that a firm qualifies for does not necessarily increase investor attraction. The results show that there is no significant effect of tax incentives on Tobin's Q as shown by a p value of 0.212 which at 5% significance level resulted in the failure to reject the null hypotheses. Thus, we established there is no significant effect of number of tax incentives a firm qualifies for on the Tobin's Q of listed manufacturing companies in Kenya.

H₀₂ *There is no statistically significant effect of effective tax rate on the investor attraction of listed manufacturing companies in Kenya.*

The results revealed that the effective tax rate had a negative but significant relationship with Tobin Q of listed manufacturing companies in Kenya. This is shown by a coefficient of -0.694 and a p value of 0.017. This can be interpreted to mean that, a decrease in effective tax rate could lead to an increase in the investors' attraction. Therefore at 5% significance level, we rejected the null hypothesis and established that there is a significant effect of effective tax rate on the Tobin's Q of listed manufacturing companies in Kenya.

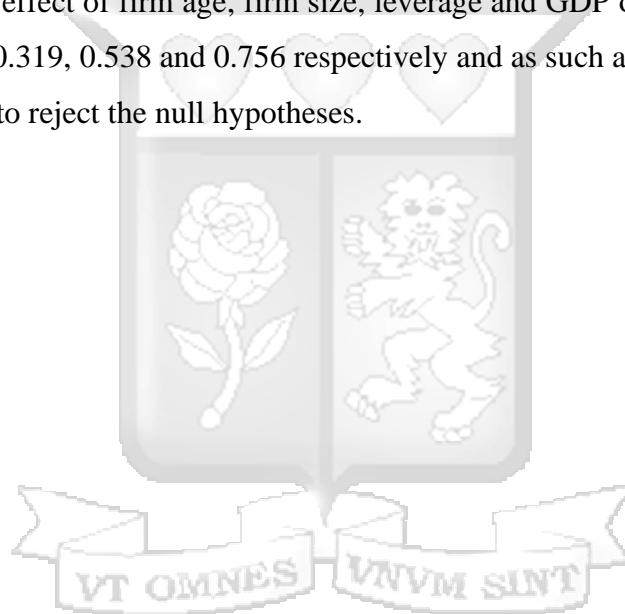
H₀₃ *There is no statistically significant effect of tax progressivity on the investor attraction of listed manufacturing companies in Kenya.*

The results revealed that tax progressivity had a positive and significant relationship with Tobin Q of listed manufacturing companies in Kenya. This is shown by a coefficient of 0.040 and a p value of 0.000. From the results, it can be argued that lowering the tax rate may not help attract more investments into the listed manufacturing firms. This suggests that investors may value firms that are more conservative in their approach to taxation and overestimate their tax

filings. Therefore at 5% significance level, we rejected the null hypothesis and established that there is a significant effect of tax progressivity on the Tobin's Q of listed manufacturing companies in Kenya.

H₀₄ There is no statistically significant effect of control variables on the investor attraction of listed manufacturing companies in Kenya.

The study revealed there was no statistically significant effect of firm age, firm size, leverage, and GDP on the Tobin Q of the listed manufacturing. The coefficients of firm age: -0.002, firm size: 0.033, leverage: -0.001 and GDP: 0.158 can be interpreted to mean that an increase in firm size and GDP could lead to an increase in the investors' attraction, while an increase in firm age and leverage does not necessarily increase investor attraction. The results show that there is no significant effect of firm age, firm size, leverage and GDP on Tobin's Q as shown by p values of 0.956, 0.319, 0.538 and 0.756 respectively and as such at 5% significance level resulted in the failure to reject the null hypotheses.



CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The fifth chapter of the research presented the summary of the study and the discussion of the results in relation to the empirical literature. The chapter also presented the conclusions of the study, the recommendations drawn and the suggestions for further research work.

5.2 Summary of the Study

The manufacturing sector in Kenya has been a key component to the robust growth in the country's total productivity. However, in recent years the contribution of the sector has been declining and the performance of the listed manufacturing companies has been volatile. The sector has been experiencing a falling GDP share in recent years from 9.3 per cent in 2016 to 7.2 per cent in 2021. Despite manufacturing being a key pillar in the development agenda, the country generally lacks a predictable and stable tax policy that gives manufacturers a long-term view to enable them to make appropriate growth plans. This study therefore utilised Kenyan listed manufacturing firm-level panel data set over the period 2009 - 2021 to investigate the nexus between corporate taxation and investor attraction in the manufacturing sector in Kenya. Specifically, the study examined the effect of tax incentives, effective tax rate, and tax progressivity on investor attraction of listed manufacturing companies in Kenya. The research adopted the neoclassical investment theory and the Q theory of investment in guiding the study. A positivist philosophy was used in the course of the study with a descriptive research design being applied. The population for this study was the 20 manufacturing firms that are listed in the NSE. The study relied on annual panel data that was collected from the audited financial statements of the listed manufacturing firms. The collected study data was analysed using both descriptive and inferential tests.

5.3 Discussion of Findings

This section presents the discussion of the study findings. The study findings are showcased in line with the objectives of the study. The main objective of the study was to examine the effect of corporate taxation on investor attraction of manufacturing companies listed on the NSE, Kenya. The study analysis revealed that there existed a statistically significant relationship between corporate taxation and the investor attraction of listed firms in Kenya as measured by Tobin Q.

5.3.1 Tax Incentives and Investor Attraction of Listed Manufacturing Companies

The study's first objective examined the relationship between number of tax incentives a firm qualifies for and investor attraction of listed manufacturing companies. The study found that there is no significant effect of tax incentives on the Tobin's Q of listed manufacturing companies in Kenya.

The study results were corroborated by Asih (2020) who conducted a study on the assessment of effects of tax policy on FDI in Southeast Asia, specifically looking into the impact of tax incentives on FDI. Similar to the current study, the study utilized panel data with available tax incentives for the period under study as a key variable. The study determined that tax incentives did not possess a significant relation to FDI thereby indicating that tax holidays and tax incentives may not attract FDI. The study was further supported by Bobenič Hintošová, Sudzina and Barlašová (2021) who carried out a study in Slovakia to investigate the effects of investment incentives on FDI inflows and on selected macroeconomic variables. The study determined that tax incentives had an insignificant effect on FDI. The analysis showed that while financial incentives such as rent and tax holidays had a significant impact on FDI inflows, tax incentives had an insignificant effect. The study concluded that tax incentives were reported to be less attractive since they are associated with difficulties administering the incentives, misallocation of resources, and potential corruption.

The study was however disputed by Appiah-Kubi, et al. (2021) who utilized data reported between 2000 and 2018 from forty countries in Africa to investigate the influence of tax incentives on FDI in African countries. The study revealed that tax withholding and tax holidays have a positive effect on FDI inflows while company tax rate had a negative and significant effect on FDI. The study was further not in line with various studies conducted in Kenya. Thuita (2017) sought after the effect of specific tax incentives, tax holidays and capital deductions, on FDI attraction and retention in Kenya's export processing zones and concluded that tax incentives greatly influenced the attraction of FDI which was contrary to the current study results. Kamau (2018) also investigated the effect of tax incentives on profitability of quoted Kenyan agricultural firms and revealed that effective tax rate had weak and significant correlation with the firm's performance.

5.3.2 Effective Tax Rate and Investor Attraction of Listed Manufacturing Companies

The study sought to investigate the relationship between effective tax rate and investor attraction of listed manufacturing companies. The coefficient was negative but significant in

relation to its effect on Tobin Q. The study established that there is a significant effect of effective tax rate at 5% significant level on the Tobin Q of listed manufacturing companies in Kenya.

Interpreting the negative effect of effective tax rate on investor attraction corroborates with neoclassical investment theory, which argues that high tax rate reduces net profit from the investment, which in turn discourages investments. Findings from the second objective were upheld by Naoui and Kasraoui (2020) who examined the impact of tax reforms on firm-specifics and corporate effective tax rate in Tunisia. The analysis revealed that tax reforms had seen an increase in firms' inventory, size and research and development investment. However, lowered corporate taxes had an insignificant effect on firms characteristics. The study recommended more reduction to the statutory rate to realize the benefits of low tax on firm growth. The study results were further supported by Melo-Becerra, Mahecha and Ramos-Forero (2021) who investigated the relationship between frequent tax reforms and corporate investments with a focus on the Colombian government. The study revealed that tax reforms significantly impact investor decisions. The analysis revealed that lower corporate taxes, tax deductions, and exemptions all increased corporate investment depending on individual firms' tax burden, firm characteristics and tax benefits received.

The study results were however in disagreement with a study by Nigeria's Ese (2021) who investigated the effect of the country's effective tax rate on the value of listed commercial banks. Similar to the current study, Tobin's Q was utilized as the proxy for firm value. Analysis revealed a direct and significant effect of effective tax rate on Tobin's Q, confirming that investors can predict a firm's value by following effective tax rate developments since a lower ETR increases share prices among Nigerian banks.

5.3.3 Tax Progressivity and Investor Attraction of Listed Manufacturing Companies

Lastly, the study further sought to find out the link between tax progressivity and investor attraction of listed manufacturing companies in Kenya. The coefficient was positive and significant in relation to its effect on Tobin Q. The research established that there is a significant effect of tax progressivity on the Tobin Q of listed manufacturing companies in Kenya.

The study findings corroborated the research by Cheong, Lee, & Weissmann (2020) who sought to examine the tax structure and its effect of performance of manufacturing SMEs in Malaysia. The study concluded that tax progressivity lowers net profit growth and return on assets but impacts Tobin's Q positively similar to our current study's results. The study

concluded that positive impact on Tobin Q suggested that investors valued firms that were more conservative and overestimated their tax filings and hence were more attracted to them. The study results were further supported by Asih (2020) who conducted a study on the assessment of effects of tax policy on FDI in Southeast Asia specifically looking into the impact of corporate income tax on FDI. The study found that CIT has a positive and a significant effect at 10% level of significance on FDI. The conclusion from this finding was that lowering CIT rate may help attract more FDI into Southeast Asia.

The study findings were however contradicted by Chisakulo and Kambani (2017) who examined the Zambian tax system to determine its effect on the attractiveness of the country's mining industry. A qualitative approach was utilized similar to the study. The study analysis revealed that the progressive tax systems had an insignificant effect on shareholder wealth and investor attractiveness. The study analysis further revealed that the corporate income tax and mine royalties tax employed in Zambia were similar to those applied in other regions and that progressive tax systems are not attractive to investors.

5.4 Conclusion

The study concluded that corporate taxation considering the combined effect of tax incentives, effective tax rate and tax progressivity held a significant effect on investor attraction of listed manufacturing companies in Kenya. This suggests that tax structures have a significant impact on the financial performance and investment attractiveness of firms. As such, policy makers should carefully consider the impact of taxation policies on investment attraction and strive to strike a balance between generating revenue for the government and promoting investment in the economy.

The study's first objective concluded that tax incentives had an insignificant effect on the investor attraction of listed manufacturing companies in Kenya. This suggests that tax incentives alone may not be sufficient to promote investment in the manufacturing sector. This highlights the need for a more comprehensive approach to promoting investment in the manufacturing sector. The study further concluded that investors look beyond tax incentives when evaluating investment opportunities in the manufacturing sector and consider several other factors such as the quality of management, competitive advantage, and growth potential of the company.

The study's second and third objective concluded that effective tax rate and tax progressivity portrayed a significant effect on the investor attraction of listed manufacturing companies in

Kenya. This suggests that the effective tax rate and tax progressiveness are key tax factors in promoting investment attractiveness in the manufacturing sector. This therefore means that investors take into consideration effective tax rates when making investment decisions. In terms of tax progressivity, it means that investors may value firms that adopt a conservative approach in their tax filings.

5.5 Recommendations

Based on the conclusion that corporate taxation has a significant effect on investor attraction of listed manufacturing companies in Kenya, the study recommended that firms should consider the tax implications of their operations and factor them into their investment decisions. This may involve working closely with tax experts and financial advisors to optimize their tax position. The study also recommends that investors should pay close attention to the tax policies of the companies they are considering investing in. This may involve analysing financial statements and engaging with management to understand the tax implications of their operations. Additionally, policy makers should carefully consider the impact of corporate taxation on investment attraction when making tax policy decisions. They should strive to strike a balance between generating revenue for the government and promoting investment in the economy.

The study concluded that tax incentives have no significant contribution to the investor attraction of listed manufacturing companies in Kenya. Based on this conclusion, the study recommends the need for a more nuanced approach to promoting investment in the manufacturing sector. The government can support this by offering customized tax incentives for firms that invest in specific areas such as research and development or environmental sustainability. The study further recommends that policy makers consider conducting a review of the current tax incentive policies to determine their effectiveness and make necessary adjustments ensuring that the policies are aligned with the objective of promoting investment in the manufacturing sector.

The study also established that effective tax rate and tax progressivity are essential factors factor in increasing investor attraction of listed manufacturing companies. The study therefore recommended that in order to raise investments in the manufacturing sector, policymakers need to create an effective and pro-industry national taxation structure. Given the significance of taxation on investor attraction, the taxation regime has to address the three main challenges. One, lack of clear tax policy objectives such as taxing raw materials that are to be used for

manufacturing and introducing excise duties that increase cost of production. Policymakers should come up with clear tax objectives which are consistent with the country's economic policy objectives. Two, frequent changes in the tax code evidenced by the annual finance bill changes. Tax changes are accompanied by significant requirements for compliance which increase complexities and costs and do not motivate investors. The tax code should therefore be stable to allow firms for efficiency in compliance and resource planning. Third, multiple taxation witnessed at county and national government levels. Policymakers should address this issue in order to reduce cost of manufacturing in Kenya and attract more investments into the sector.

5.6 Contribution to Knowledge

This study examined the effect of tax incentives, effective tax rate, and tax progressivity on investor attraction of listed manufacturing companies in Kenya. The study employed industry-level and firm-level data that are found to better capture the effect of taxation. This is a shift from previous studies that employed aggregate-level data that may not be appropriate as it ignores the heterogeneity in tax responsiveness which vary across industries and firms. In our study, panel data was also used as opposed to time-series and cross-section data which may not detect, identify, and measure relationships among variables. Panel data collected over a longer period from 2009 to 2021 provided a large dataset which enabled this study to decrease the possibility of high collinearity among variables, increase degree of freedom and improve the efficiency of econometric estimations. This study also utilised the FEM and REM regression techniques which are considered a better approach considering the heterogeneity of the sample. Considering the prevalent use of tax policy to attract investments in developing countries, the study findings are key in driving policy decisions regarding taxation matters.

5.7 Limitations of the Study

The study faced various limitations. The study relied on secondary data from financial statements, which companies are by law mandated to store data for seven years and as such some manufacturing firms lacked published data for certain years. The study did not also incorporate qualitative data such as interviews or surveys with investors or firms, which could have provided additional insights into the factors influencing investment decisions. Further, the data used in the study only covered a specific period, and it may not be representative of the long-term effects of corporate taxation on investor attraction. These limitations may be

mitigated by conducting further studies to provide a more comprehensive understanding of the relationship between corporate taxation and investor attraction.

5.8 Areas for Future Research

The various limitations of this study point to a number of factors that may benefit future studies. First, while this study examines the effects of tax policy on firm-level investor attraction, employing aggregate-level data may enable researchers to better capture the asymmetric effect of tax policy on investor attraction because tax responsiveness may differ across sectors. Further studies could replicate this study in other sectors to investigate the relationship between corporate taxation and investor attraction across many sectors of an economy. This would provide a more comprehensive understanding of the impact of corporate taxation on investor attraction across various sectors.

Second, in terms of estimation approaches, the current study utilized quantitative data. Qualitative studies such as interviews or focus groups could be conducted with investors and firms to gain an in-depth understanding of the factors influencing investment decisions and provide insights into the contextual factors that influence the relationship between corporate taxation and investor attraction.

To summarise, this study investigates the effect of effect of corporate taxation on investor attraction by focusing on tax incentives, effective tax rate and tax progressivity in the context of listed manufacturing firms in Kenya. Nevertheless, there are still many areas that can be explored, particularly regarding the data and empirical estimations. Considering the prevalent use of tax policy to attract investments in developing countries, more studies are needed to investigate the effectiveness of tax policy in promoting investments.

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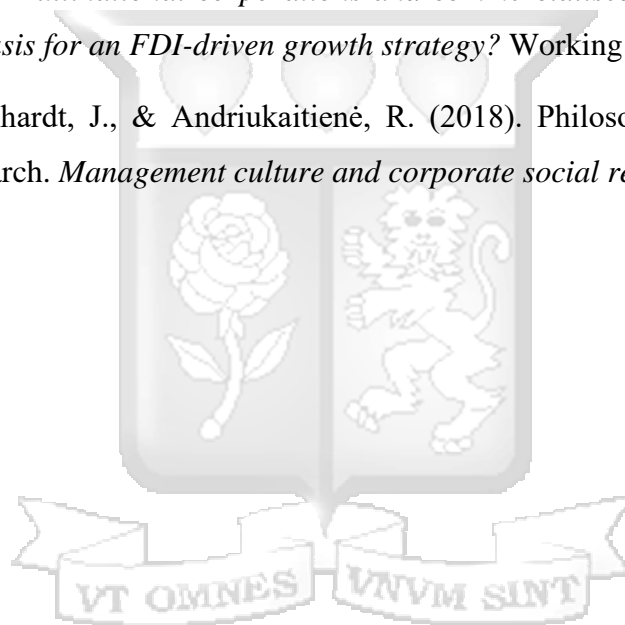
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APPENDICES

Appendix I: Strathmore University Ethical Review Committee Approval



6th March 2023

Ms Kariuki Carlyne,
kariuki.caroline@strathmore.edu

Dear Ms Kariuki,

RE: Corporate Taxation and Investor Attraction: Evidence from Kenyan Listed Manufacturing Firms

This is to inform you that SU-ISERC has reviewed and approved your above SU- master's research proposal. Your application reference number is SU-ISERC1601/23. The approval period is from 6th March 2023 to 5th March 2024.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.


Yours sincerely,

for: Dr Ben Ngoye,
Secretary; SU-ISERC

Cc: Mr Ambrose Rachier,
Chairperson; SU-ISERC



Appendix II: NACOSTI Research Permit

 <p>REPUBLIC OF KENYA</p>	 <p>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p>
RefNo: 584460	Date of Issue: 24/March/2023
RESEARCH LICENSE	
	
<p>This is to Certify that Ms.. Carolyn Kariuki of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Corporate Taxation and Investor Attraction: Evidence from Kenyan Listed Manufacturing Firms for the period ending : 24/March/2024.</p>	
License No: NACOSTI/P/23/24360	
584460	
Applicant Identification Number	Director General
	NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code
	
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

Appendix III: List of Listed Manufacturing Companies

1. Kenya Orchards Ltd.
2. Unga Group Plc.
3. East African Breweries Plc.
4. British American Tobacco Kenya Ltd
5. Carbacid Investments Ltd.
6. Mumias Sugar Co Ltd.
7. BOC Kenya Ltd
8. Flame Tree Group Holdings Ltd.
9. Eveready East Africa Ltd.
10. Eaagads Limited
11. Kapchorua Tea Company Limited
12. Kakuzi PLC
13. REA Vipingo Plantations Limited
14. Sasini Limited
15. Williamson Tea Kenya Limited
16. Athi River Mining
17. Bamburi Cement PLC
18. Crown Paints Kenya PLC
19. East African Cables PLC
20. East African Portland Cement

