## THE IMPACT OF TAX INCENTIVES ON FOREIGN DIRECT

## **INVESTMENTS INFLOWS IN KENYA**

BY

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# A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER, 2018

## DECLARATION

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any institution or university other than th	e University of Nairobi for examination.
I, the undersigned, declare that this is my	y original work and has not been presented to

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

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## ACKNOWLEDGEMENT

I take this opportunity to thank the Almighty God for seeing me through the completion of this project. A work of this magnitude is never accomplished without reminiscence to our Creator. In addition, I am grateful my family, friends and colleagues. Thank you for the tremendous support during my entire period of study. I also express my deepest gratitude to my supervisor Mr. Abdullatif Essajee for his guidance and advice during the research project period.

## **DEDICATION**

I dedicate this work to my parents Jones Kyule Munyao and Agnes Kyule and my brothers David and Andrew. I thank you very much for the love, patience and sacrifices that you have made for me. I have been forced to be away from you most of the time and at the hour of need but with your understanding, patience and prayers, we have reached this far.

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## LIST OF ABBREVIATIONS

- CBK Central Bank of Kenya EAC East African Community Export Processing Zone EPZ FDI Foreign Direct Investments Gross Domestic Product GDP IMF International Monetary Fund Kenya National Bureau of Statistics KNBS KRA Kenya Revenue Authority MNC Multi-National Corporation NSE Nairobi Securities Exchange **SPSS** Statistical Package for Social Sciences United Nations Conference on Trade and Development UNCTAD
- USD United States Dollar

## ABSTRACT

The role of tax incentives in promoting foreign direct investments has been the subject of many studies. Their relative impact has, however, not been clearly established. Some researchers contend that the effect of tax incentives on foreign direct inflows is significant while others argue that tax incentives are both bad in theory and in practice-since they have a negative impact on the investment decisions. This study sought to determine the effect of tax incentives on foreign direct investments inflows in Kenya. The independent variable was tax incentives as measured by the natural logarithm of quarterly tax incentives provided by the government. The control variables were interest rates as measured by the Central Bank of Kenya lending rate on a quarterly basis, economic growth as measured by quarterly GDP growth rate and inflation as measured by quarterly inflation rate. FDI inflows in Kenya were the dependent variable which the study sought to explain and it was measured by FDI inflows in the country on a quarterly basis. Secondary data was collected for a period of 10 years (January 2008 to December 2017) on a quarterly basis. The study employed a descriptive research design and a multiple linear regression model was used to analyze the relationship between the variables. Statistical package for social sciences version 21 was used for data analysis purposes. The results of the study produced R-square value of 0.664 which means that about 66.4 percent of the variation in FDI inflows in Kenya can be explained by the four selected independent variables while 33.6 percent in the variation was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with FDI inflows (R=0.815). ANOVA results show that the F statistic was significant at 5% level with an F statistic of 17.295. Therefore the model was fit to explain FDI inflows in Kenya. The results further revealed that individually tax incentives, interest rates and economic growth are not significant determiners of FDI inflows in Kenya while inflation is a significant determiner. This study recommends that there is need for policy makers to regulate inflation levels prevailing in the country bearing in mind that they significantly influence FDI inflows in the country.

# CHAPTER ONE

## INTRODUCTION

#### **1.1 Background of the Study**

Foreign direct investment (FDI) has been growing drastically given that it is a major form of international capital inflows as well as due to its ability to transform developing economies financially and politically (Adam & Tweneboah, 2009). According to Njuguna (2016), the effort made by developing countries in attracting FDI is based on the potential positive effects on the home economy such as productivity increase, complementing domestic private investment, transfer of technology, management and technical skills, providing an international production network, training of employees, creating employment opportunities, and easy access to external markets which then boosts the overall economic growth. Global studies indicate that tax incentives are one of the key factors influencing FDI inflows into a given country (Loyford & Moronge, 2014).

The contribution of tax incentives on investments can be theoretically explained in terms of the compensation externalities and infant-industry fostering policies of the host government. According to UNCTAD (2012), corporate investments generate both returns by selling goods produced and creating positive externalities accruing from such factors as the upgrading of labour skills, diffusion of new knowledge and economies of scale.

Kenya has a long standing rich history with foreign firms dating back to the 1960s. For years, Kenya has been seen as an attractive destination for foreign investors seeking to invest in the greater East and Central Africa region. Kenya continues to serve as the East African business hub of choice for a number of multinational companies like Proctor & Gamble, General Motors, Microsoft, Google, Coca-Cola, Citibank and Ogilvy and Mather among others. It is worth noting that foreign investors control about 51% of the nation's total banking assets (CBK, 2015). Kenya has been seen as a favorable hub for the region because of its connectivity to worldwide hubs, its skilled and educated workforce, tax incentives, advanced financial system, developed infrastructure and strategic regional trade memberships and partnership agreements (Ryan, 2006).

## **1.1.1 Tax Incentives**

Mutua (2011) defines tax incentives as the exclusion, exemption or deduction from tax liability offered so as to encourage engagement in a specified investment activity. According to Morisset and Pirnia (2001), tax incentives can also defined as deductions, exclusions or exemptions from tax liabilities, offered as inducements to engage in special activities such as investments in manufacturing sector for a certain period. Tax incentives are given to attract FDI and to promote certain economic policies so as to motivate investments in a particular sector. The most dominant tax incentives take the form of investment allowances, tax credit, special economic zones, reduced tax rates and tax exemption. Specific tax incentives include capital allowances, capital market incentives, EPZ benefits and tax remissions for exports (UNCTAD, 2012).

Tax incentives are awarded so as to exploit investments opportunities in environments where tax regimes seem to be a barrier. Tax incentives also improve the community's social welfare through granting incentives related to education, health or making savings for future use. Alternatively, they are also introduced to discourage overproduction of agricultural products which creates price instabilities (Klemm, 2009).

In Kenya, tax incentives are mainly provided for under the Value Added Tax Act, Income Tax Act and the EAC Customs Management Act; The incentives include: a ten (10) year corporate income tax holiday for EPZs, exemption from import duties and VAT on raw materials and machinery, manufacturing under bond (MUBs) for Exports, investment allowance of 150% on capital investments and EAC Duty Remission Scheme for manufacture of goods for export (IMF, 2015).

Legitimate reasons as to why tax incentives are ideal for investments exist although strong reasons also exist as to why the economic and fiscal costs could be relatively higher than the benefits. In some countries, the tax incentives have failed to attain higher investments. However, under some scenarios, the incentives have been removed without significant reductions in investment inflows into the Host Country (UNCTAD, 2012).

### **1.1.2** Foreign Direct Investments

Muema (2013) defined FDI as the long lasting investments which are outside the investor's physical or economic boundaries. The beneficiary country of FDI is equipped with capital flow as well as technology flow that will aid in its development. When a country seeks to invest in another, the benefit it seeks to achieve must be higher than the risks it must deal with. UNCTAD (2012) describes three different types of FDI. These are: reinvested earnings, equity capital and other capital which mainly consist of intercompany loans. FDIs create new job opportunities as upon setting of the business, recruitment and training of the locals in the host country is undertaken transferring skills and technological know-how as well as providing jobs.

According to Kinuthia (2010), FDI represent long term commitments to the host country. It is a preferred form of investment because it has no obligations to the host country.

According to Kariguh (2014), foreign investment is one of the main sources of capital flows in most economies that are still developing as they tend to bridge the gap of capital, managerial skills, technology, formation of human capital as well as creating an environment for more business competition. However, according to Voorpijl (2011), there are consequences for increasing the FDI inflows whereby the multinationals can exploit the local capabilities more freely. Also, the promotion of private investment rather than public investments by many international donors leaves nothing to the host company when they decide to leave.

Generally, FDI are the net inflows of investments from one economy to another and therefore FDI is measured by the net inflow, which is the remainder of first time investment inflows after removing the divestiture and is measured as a percentage of GDP of that economy (Shahbaz, Lean & Kalim, 2013). FDI is advantageous to multinational enterprises as it is a means of entering the markets, accessibility to resources and reduced cost of production. It also benefits the invested country as it provides domestic investment capital which is much in need, creating job opportunity to locals, introduces new management skills and strategies, business practices, technology and economic concepts that ensures growth of local businesses, new industries and increased revenue which leads to economic development (Karthik & Kannan, 2011, Selma, 2013).

## **1.1.3 Effect of Tax Incentives on Foreign Direct Investments**

While FDIs face many constraints, lack of well-structured and attractive tax incentives invariably appears in previous surveys as a major hurdle to realizing growth in FDIs. Globally, tax incentives constribute to the promotion strategies of the government. Different countries have adopted various tax incentives so as to boost growth, attract FDI, promote technological transfer and diversify production. Taxes influence the net return on capital and most policymakers consider it to have great impact on capital movements between nations (Morisset & Pirna, 2001).

Tax incentives proponents point out that investors earn a higher rate of return as a result of lower tax burdens which enables them to re-investment using the additional income obtained. The host country thus raises its income, benefits from the technology transfer and attracts increased FDIs. It is also argued that in less developed countries (LDCs), it is necessary to provide tax incentives to investors given that such countries usually have very poor investment climates such as dilapidated infrastructure, volatility in politics, macro-economic instability and high cost of doing business (Basu & Srinivasan, 2002).

The African Development Bank and IMF report of 2006 examining the tax incentives in East Africa confirmed that the contribution of tax incentives in promoting FDIs in the region was negligible. Another report by the IMF further indicated that, majority of the countries with huge FDIs have not necessarily offered large incentives and tax incentives and that incentives do not encourage FDI without other factors such as low administrative costs in setting and running businesses, good quality infrastructure, predictable macro-economic policy and political stability (Basu & Srinivasan, 2002).

### 1.1.4 Tax Incentives and Foreign Direct Investments in Kenya

In 2008, Kenya launched vision 2030 with the objective of among other things to achieve global competitiveness for FDI and gain economic prosperity. There has been inconsistencies in Kenyan trends of FDI inflows starting with the 1970-1980 period. The then relatively high development level, good infrastructure, market size, growth and openness to FDI at a time when other nations in the zone had relatively closed regimes contributed to the multinational companies selecting Kenya as their regional hub.

FDI has not been consistent over the years with some periods recording low inflows. In the 1980s and 1990s, FDI inflow was low due to deterioration in economic performance as well as rising problems of poor infrastructure and the high cost of living greatly impacted negatively on FDI inflows in Kenya (KPMG, 2012). In total, Kenya has more than 200 multinational companies across the sectors with Britain, USA, Germany, South Africa, Netherlands, Switzerland, China and India being the main traditional sources of FDI (Kinuthia, 2010).

Kenya serves as the East African business hub for many international businesses. This translates to a dependence of FDI for capital inflow that in turn reflects on provision of jobs and an economy that is helped to grow by these foreign investments. Kenya's FDI average percentage growth between 2007 and 2016 was forty percent (40%) with the inflows primarily channeled into retail and consumer products, technology, media, telecommunications, minerals, oil and natural gas sector mainly from the UK,USA and India (Ernest & Young, 2015). In 2016, FDI inflows stood at USD 1076.9 million (KES 105.29 billion), up from USD 670 million (KES 65.51 billion) a year earlier

which is a sixty per cent (60%) increase. This capital mainly went to oil, gas and the manufacturing industries (UNCTAD, 2016).

#### **1.2 Research Problem**

Foreign direct investments play a significant role in the growth of economies worldwide. The role of tax incentives in promoting FDI has been the subject of many studies, but their relative impact has not been clearly established (Voorpijl, 2011). Hartman (1984) and Young (1988) contend that the effect of tax incentives on foreign direct inflows is significant. Slemrod (1990) criticized Hartman's research for lack of a perfectly specified model. He made modifications to correct Hartman's model. His findings concluded that foreign direct inflows are not responsive to taxes. A study by Easson and Zolt (2002) argues that tax incentives are both bad in theory and in practice in growing nations since they have a negative impact on investment decisions. Their objectives are hardly attainable since they are perceived as corrupt. It was therefore recommended from the study that the government needs to regularly evaluate its effectiveness and minimize chances of attracting corruption so as to improve their chances of success.

Kenya is putting in place strategies to attract FDI into the country. According to the World Bank doing business report of 2016, in an attempt to increase Foreign Direct Investment, Kenya simplified business creation procedures and business license acquisition, improved credit accessibility and encouraged public private partnership. Foreign firms are surging into Kenya to venture into sectors such as oil and exploration, the booming technology industry, transport, real estate and manufacturing which have shown positive returns over the years. MNC have chosen Kenya as their regional hub as opposed to the other countries due to its market size, high development, suitable labor, promising middle class, tax incentives and good infrastructure (Abala, 2014). As reported by US data vendor that tracks emerging markets, Kenya has been ranked second in the most preferred African destinations and fifth globally. The most prosperous year for Kenya in FDI was 2007 when there was an inward investment amount of USD 729 million which accounted for 2.7 percent of total GDP. Foreign Direct Investment slowed in 2008 due to post election violence followed by an increase in 2009 with FDI reporting 425.1 million in 2014 (Kenyan Economic Report, 2015).

Empirical evidence is largely inconsistent and quite varied on the influence of tax incentives on FDI. Klemm and Parys (2009) conducted an empirical research to address the question on how effective tax incentives are in attracting investments. Data was collected in over 40 Latin American, Caribbean and African countries between 1984 and 2004. The results showed that lower corporate income tax rates and longer tax holidays are efficient in attracting FDI, but not in boosting gross private fixed capital formation or growth. Sebastian (2009) conducted an analysis on how tax incentives may or may not be used to attract investments especially in developing countries. The analysis was based on research done using micro economic data collected from OECD countries. Micro economic data provides little information on the effect of tax policies on investments (Hassett & Hubbard, 2002). The analysis led to the conclusion that tax incentives alone have minimal impact on investments. In order to attract investments, a good investment climate is also needed.

Locally, Kinaro (2006) found that Kenya's FDI is influenced by human capital, economic openness, inflation, FDI in the previous periods and real exchange rate. A study by Opolot, Mutenyo and Kalio (2008) using panel data for the Sub-Saharan

African countries including Kenya established that openness to trade, market potential, urbanization, investment return rate and infrastructure positively influence FDI inflows to Sub-Saharan Africa, while foreign direct investment is negatively influenced by macroeconomic instability.

The lack of consensus among the various scholars on the effect of tax incentives on FDI is reason enough to conduct further examination on the area of study. In addition, the reviewed studies in the Kenyan context have failed to show how tax incentives influence FDI inflows. This study intends to fill this research gap by investigating the effect of tax incentives on FDI in Kenya. The study intends to answer the following the research question; What is the effect of tax incentives on foreign direct inflows in Kenya?

#### **1.3 Objective of the Study**

To determine the effect of tax incentives on foreign direct inflows in Kenya

## 1.4 Value of the Study

The findings of this research shall form a reference basis for researchers, scholars and students in the same area of study. The study will be valuable to them in identifying areas that need more research in light of the literature reviews and identifying existing gaps.

The findings are hoped to be of benefit to policy makers in developing investment strategy policies and developing the necessary institutional framework required to market Kenya as an ideal foreign investment destination. Also, it will help them in coming up with policies that ensure maintaining tax incentives that are consistent with the objective of attracting foreign direct investments. The research findings will benefit international investors in making informed decisions in venturing into the Kenyan Market. Investors with an interest in the Kenyan market will be able to make informed evaluation with regard to the influence of tax incentives on foreign direct investments in the country.

## **CHAPTER TWO**

## LITERATURE REVIEW

#### **2.1 Introduction**

The chapter reviews theories that form the foundation of this study. In addition, previous empirical studies that have been carried before on this research topic and related areas are also discussed. Other sections of this chapter include determinants of foreign direct investments, conceptual framework showing the relationship between study variables and a summary of the literature reviewed.

## **2.2 Theoretical framework**

This section presents a review of the relevant theories that explain the associations between tax incentives and foreign direct investments. The theoretical reviews covered are; consumer and producer surplus theory, internalization theory and the eclectic paradigm theory.

## 2.2.1 Consumer and Producer Surplus Theory

Consumer and producer surplus theory implies that government lure firms to invest in their countries to create employment and create outputs for the local market. They evaluate potential investors based on their ability to improve quality of life for their citizens (Chen, 2001). FDI involvement with local market for inputs and outputs contributes to economic growth of the host nation. In most cases the governments' demands employment of local citizens to the industries. (Glaeser, 2001).

When making a decision on tax incentives to offer, the government should consider benefits created by the presence of the investor. The magnitude of the tax incentive should be equal to the consumer or producer surplus generated. This is determined by elasticity of demand and supply. When labor supply to the firm is elastic there will be little local surplus. The government should not offer tax incentives unless labour supply is inelastic. On the other hand, highly elastic demand generates little consumer surplus. However, an inelastic demand to the firm's products generates higher surpluses and government should offer tax incentives. Another factor that can generate consumer surplus is that, if the firm has large fixed costs and prices of its products are set close to marginal costs then the surplus goes to the consumer (Glaeser, 2001).

### **2.2.2 Internalization Theory**

This theory was advanced by Casson and Buckley in 1976. Further development of the theory was by Hennart (1982) and benefitted from additional works of Casson (1983). The theory explains the growth of multinational corporations and their motivations. It demonstrates that multinational corporations organize their internal activities to achieve specific advantage and exploit them to enhance its competitiveness. According to Hymer (1976), FDI will occur only when the exploitation of firm specific advantage supersede the relative cost of investing abroad. In summary, he implies that FDI occur in imperfect markets and it is simply a strategy decision at firm level rather than a financial decision of the capital market.

Casson and Buckley (1976) argue that an FDI is only desirable if the ownership, location and internalization (OLI) conditions are met. First, the multinational must have an ownership advantage compared to the local firm's ownership. This may be in form of the multinational's specific organizational or technological knowledge. The government policies likely on the benefits of investing in a certain host country are also vital. In some cases the host government may pose regulations concerning the nature of foreign ownership. Such restrictions in effect reduce FDI inward inflows which will be accompanied by technology. Secondly, it must be advantageous for the multinational companies as well as other investors to produce in the host country if they can benefit from some comparative locational advantage. Finally, it should be suitable to execute the activities within the host countries, as opposed to leasing or buying them from other firms.

## 2.2.3 Eccletic Paradigm Theory

Dunning (1993) came up with this theory which is in itself a mix of three different but correlated theories. These theories are ownership, location and internalization (OLI) which are used to describe how the factors therein contribute to changes in foreign direct investments. Ownership related advantages are those provided by intangible assets. These assets must however be considered as exclusive possessions held and owned by the company and are transferable to other firms at prices that would lead to reduction of costs to the company, or would lead to the company registering high rates of return. In his arguments, Dunning (2005) argues that when all other factors are held constant, a company with a higher level of competitive advantages, in comparison with its competitors, has a higher chance in increasing its overall production and hence increasing its global presence.

Location benefits, as explained by Denisia (2010) are used to compare the different economies, as per their strengths and opportunity. The end result of this analysis is that the most suitable country is selected to be a host country for the activities of multinational firms. The correlation existing between location and ownership advantages is that when a multinational corporation is able to host itself in the most suitable economy, it is now able to engage in the exploitation of its ownership related abilities, and thus leading to the firm engaging in foreign direct investment.

Internalization establishes a need for the firm to be able to have an established business in each of the economies that the company sells its products or services. The firm must derive ways through which it can benefit further through foreign production as compared to the meager fees that are earned in international trade activities such as exporting and franchising. Dunning (2005) states that a corporation is more likely to get higher returns if, it engages in foreign production as opposed to the extension of its production rights to other countries. The eclectic paradigm is therefore in support of the establishment of production markets by a corporation through exploitation of its competitive advantages and the selection of suitable locations. In doing this, the corporations are not only engaging in foreign direct investments but also gaining much more than their competitors.

## **2.3 Determinants of Foreign Direct Investments**

FDI involves real assets and this ensures that an investor will be active in managing the assets he is acquiring. A number of issues exist which cause the attractiveness of one country to be more than the other and these factors can also vary from one period to another. These determinants have contributed to studies on why some given countries are more prosperous than others nations in attracting FDI. Quite many researches have been carried out on the determent factors of FDI but so far there is yet to be a definite consensus. The different approaches to the determinants of FDI do not cancel each other out but expound on various issues of a similar phenomena (Kinuthia, 2010).

Singhania (2011) argues that interest rates are normally adjusted to reflect changes in inflation. As a result, interest rates are critical determinants of foreign direct investment. Traditionally, investors will shop for low cost credit sources or lower rates of interest and invest in economies that are promising higher returns. According to Vesarach (2014), who conducted a study on the role of interest rates in attracting FDI in the Asian economies; the results showed that the determinants of FDI are interest rates, inflation, GDP, exchange rates, labor cost, money growth and political rights. The researcher concluded that countries should offer competitive interest rates to attract foreign direct investments in their country.

A high level of inflation indicates tensions in the economic environment of a country and depicts the government's reluctance to have a stable monetary policy. It can be argued that risk averse foreign investors coupled with high levels of inflation will cause decreases in FDI in the host country since investors are not willing to risk the profits that they expect from their investments (Kadongo, 2011). Given high uncertainty levels, investors are bound to demand high price levels in order to offset their exposure to inflationary risks which are bound to lower the volume of investment. Thus as a move to motivate investments, inflation rate stability is vital (Gastanaga et al., 1998). Nwankwo (2006) has stressed macroeconomic policy failures as deflecting FDI flows from Africa; he points that, poor monetary and fiscal policies cause unsustainable deficits in budgets and increase inflationary pressures thereby raising the production costs in the local country and thus creating instability in exchange rates and thereby the region becomes a risky destination for FDI (Onyeiwu & Shrestha, 2004). Exchange rate is an essential component affecting FDI. Asiedu (2002) stated that different currency areas were responsible for the generation of FDI. Dunning stated that greater fixed capital stakes of an investment showed the possibility of taking into account future movements in exchange rates (Dunning, 1993). Goldberg (2011) agrees that exchange rates volatility impact location decisions of MNCs. Other research indicates that exchange rate risk contributes significantly in explaining FDI (Gastanaga et al., 1998). Exchange rate volatility may negatively affect and reduce direct investment. Gastanaga et al., (1998) based on an analysis of macroeconomic factors, institutional and legal frameworks and risk in determining FDI, proved that market size, fiscal deficit, inflation and exchange rate movements have been shown to be relevant and significant to FDI because exchange rate volatility contributes directly to uncertainty in the transaction plan from the countries investing (Behera, 2008).

Many scholars have been attracted to the issue on the role played by economic development in attracting foreign direct investment. According to Charkrabarti (2001) better improved opportunities for gaining profits are attributed to a rapidly growing economy as compared to those that are growing slowly or not increasing at all. Mishkin and Eakins (2009) found a high outcome of growth on FDI. Basing on the same guidelines, Aoki (2007) established that for the less developed countries, there is a weak positive association and a weak negative relationship for the developed Nations. Gastanaga et al., (1998) found significant positive effects of growth on FDI.

Productivity of investment is increased by good infrastructure which increases FDI flows (Asiedu, 2002). According to Wheeler and Mody (1992) infrastructure is very

crucial for developing countries. It is not only made up of roads alone but also telecommunications. In order to enhance communication between the host and home countries, there is need for availability and efficiency of telephones. Not only is physical infrastructure crucial to FDI inflow, but also financial infrastructure. In order to tap the full importance of an FDI inflow, there is need for a well-developed financial. A study on the issue on factors discouraging investors in Uganda, Zambia and Tanzania, problems associated with mobilization of funds are on the priority list (Bhinda, Griffth-Jones & Martin (1999)

Developing countries' FDI is negatively influenced by political and economic uncertainty as per several studies. Negative associations between FDI and economic and political instability is evidenced as per the data sources. In a study on foreign owned firms in Africa, political and macroeconomic stability is of great concern as per a study conducted by Sachs and Sievers (1998) based on the firms owned by the foreigners in Africa. According to Jaspersen et al., (2000), Lehman (1999) more FDI is undertaken in less risky countries. FDI is hindered by high perception of risk in Africa.

## 2.4 Empirical Review

Empirical studies have been carried out both locally and internationally on the association between tax incentives and foreign direct investments, but these studies have produced mixed results.

### **2.4.1 Global Studies**

World Bank (2006) conducted a survey of firms in 15 Countries in Sub-Saharan Africa on the challenges facing FDI inflows into the continent. The survey revealed that "taxes and regulations" were viewed as a moderate or major concern by only 33%

of the respondents, which was the least for all the reported categories. In comparison, respondents exceeding 60% viewed inflation, financing, infrastructure and corruption as major constraints in attracting FDI. It was therefore concluded from the survey that the respondents put little consideration on the tax factors in the decision making process, despite the great influence of tax variables on the final decisions.

Klemm and Parys (2009) conducted an empirical study to investigate how effective tax incentives are in attracting investments. Data was collected from over 40 Latin Caribbean, American, and African counties between 1984 and 2004. FDI and private gross fixed capital formation were used as the dependent investment variables and tax as the independent variable. Their result revealed a significantly positive relationship between tax incentives and FDI.

Sebastian (2009) in his analysis of tax incentives' effect on investments in OECD countries concluded that tax incentives alone cannot lead to increased investments. The analysis was based on existing literature and case studies from developed countries. Its key results showed that every tax incentive has costs and benefits. The benefits are as a result of increased investments and costs are due to revenue losses by the government. It therefore recommended that government should prepare expenditure statements to monitor costs and benefits of tax incentives.

Piteli (2009) conducted a study on the determinant factors of FDI by multinational corporations (MNCs) in developed countries. Using a context of an estimated equation obtained from economic theory that compares the main demand and supply-side determinants of FDI, the researcher compared EU and non-EU countries. The study focused on three ways: first by employing proxies of different demand and supply factors, second, by comparison between developed European and non-

European nations, third by testing relative importance of total factor productivity (TFP) as a determining factor of FDI. The study found that TFP is a statistically significant determiner of FDI.

Okafor (2012) studied the value of domestic macroeconomic variables influence on the Nigerian FDI inflows. Economic theory predicts that foreign capital flows could stimulate economic growth of nations. He focused on the capital movement. The study used ordinary least square method as an estimation technique. The study concluded that foreign direct investment in Nigeria is majorly determined by real gross domestic product, interest rate, and real exchange rate. FDI inflow is majorly determined by domestic macroeconomic variables. The benefits and flow of the Nigerian FDI can be achieved when policy makers strive to improve the macroeconomic environment.

Omweri (2013) studied the determinant factors of foreign direct investment stock in the five East African Community nations i.e. Uganda, Rwanda, Kenya, Burundi and Tanzania to find out why the region was recording very low increase of FDI. The research employed panel data analysis methods. The study used trade openness, GDP per capita, GDP growth, telephone line (per 100 people); a proxy for infrastructural facilities, inflation, return on investment and natural resource endowment as independent variables and the stock of FDI as the dependent variable. Twelve years data was analyzed between 1991 and 2012. The study's findings showed that trade openness, inflation, and infrastructure facilities were the most crucial determent factors of foreign direct investment to EAC countries.

### 2.4.2 Local Studies

Kiragu (2005) who conducted a study on determinants of FDIs in Kenya based on the generalized least square model (GLS) revealed that economic openness is the most significant determinant of FDI inflows in Kenya. Other variables that were significant determinant of FDI inflows included growth rate of GDP, credit availability, the exchange rate and internal rate of return. The rest of the remaining variables including tax incentives, inflation rate were statistically insignificant.

Nyamwange (2009) conducted a research study to find out Kenyan FDI. The aim of the research was to determine factors which determine FDI decisions in the Kenyan context. He explored the correlation between FDI and economic development in Kenya. Findings evidenced that FDI is influenced by level of human capital, stable macroeconomic policies, taxation, and market size. Further, there was no statistically significant connection between human capital and GDP meaning that in Kenya, there is inadequate skilled employees.

Kinuthia (2010) studied the determinant factors of Foreign Direct Investment based on the 2007 Kenyan foreign firms survey. Market size, bilateral trade agreements, political and economic stability and a favorable climate of marketing firms were identified as the most important determinants. According to the researcher, political instability, crime and insecurity, and institutional factors most notably corruption are three main impediments to foreign investment inflow to Kenya.

According to PSC (2012), tax incentives have not achieved the following economic variables: increased investments; employment generation; technological upgrades and exports. The reports argued that tax incentives play a major economic role in promoting the above variables; however, they deprive the government much needed

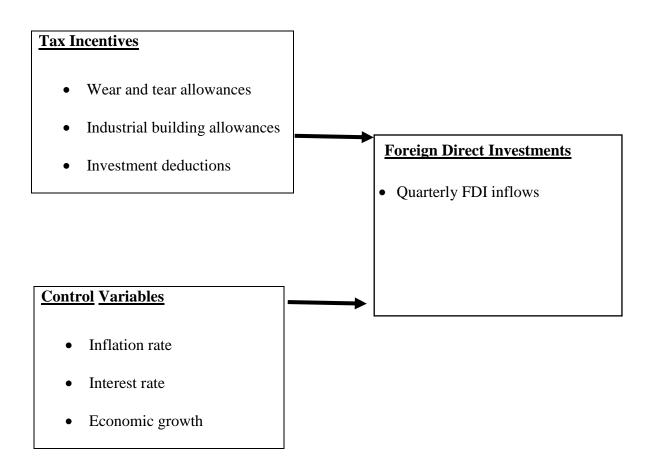
income in the short term especially where they are prone to abuse. The Government should shift efforts from offering tax incentives to encouraging domestic savings to increase formal sector employment (Attiya et al., 2009).

## **2.5 Conceptual Framework**

While FDIs face many constraints, lack of well-structured and attractive tax incentives invariably appears in previous surveys as a major hurdle to realizing growth in FDIs. Tax incentives globally form a fundamental component of the investment promotion strategies of the government. Countries have introduced a variety of tax incentives programs in a bid to attract FDI, promote technological transfer, diversify production and boost economic growth. Taxes influences the net return on capital and should, at least in the mind of numerous policymakers, affect the capital movements between nations (Morisset & Pirna, 2001).

The conceptual model developed below portrays this expected relationship between the study variables. The factors characterized here are tax incentives and foreign direct investments. The independent variable was tax incentives as measured by wear and tear allowances, industrial building allowances and investment deductions claimed by firms in a year. Foreign direct investment was the explained variable as measured by FDI inflows. The control variables that are theoretically expected to influence FDI are also included.

**Figure 2.1: The Conceptual Model** 



## **Independent Variables**

**Dependent variable** 

Source: Researcher (2018)

## 2.6 Summary of the Literature Review

Many theoretical frameworks have attempted to explain the concept of tax incentives and foreign direct investments. The three theories discussed in this theoretical review are; consumer and producer surplus theory, internalization theory and the eclectic paradigm theory. Some of the major determining factors of foreign direct investments have been discussed in this section as well. Globally and locally, there are many empirical studies that have been done on tax incentives and foreign direct investments. This chapter has also discussed the outcomes of these.

Lack of consensus among the various scholars on the influence of tax incentives on FDI is reason enough to conduct further examination on the area of study. World Bank (2006) found that tax variables can have a notable effect on the final decisions regarding FDI inflows. Klemm and Parys (2009) unveiled a significant positive relationship between tax incentives and FDI. Kiragu (2005) found that tax incentives are insignificant determinants of FDI. In addition, most of the existing empirical evidence has examined the impact of different variables on foreign direct inflows in Kenya while still others have studied the influence of FDI on the growth in the economy. However, there exist few studies on the impact of tax incentives on foreign direct investment inflows. Thus, this study intends to fill this research gap by addressing the question; what is the effect of tax incentives on foreign direct inflows in Kenya?

## **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter outlines how the research was conducted. The chapter has four sections namely; research design, data collection, diagnostic tests and analysis of data.

## 3.2 Research Design

In the study a descriptive research design was applied in determining the effect of tax incentives on FDI inflows in Kenya. Descriptive design was utilized as the researcher is interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher is familiar with the phenomenon under investigation but wants to know more in terms of the nature of relationships between the study variables. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

## 3.3 Data Collection

Data was exclusively collected from secondary sources. Quarterly data for 5 years (July 2012 to June 2017) was collected and analyzed. The data collected included FDI inflows; total revenue lost by the government through tax incentives during the sample period and interest rates, economic growth and inflation. Secondary data was collected from KNBS and KRA reports.

## 3.4 Data Analysis

After collecting data from different sources, it was organized in a manner that can help address the research objective. SPSS version 22 was utilized in data analysis. Both descriptive and regression analyses was carried out. In descriptive statistics, standard deviation, mean, the minimum, skewness, the maximum, and kurtosis was computed for each variable. In inferential statistics, both regression and correlation analysis were carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis involved establishing the cause and effect between the independent and dependent variables. A multivariate regression analysis was applied in determining the association between the dependent variable (foreign direct investments) and independent variables: Tax incentives, inflation rate, economic growth and interest rate.

## **3.4.1 Analytical Model**

Using the collected data, the researcher conducted a regression analysis to establish the extent of the relationship between tax incentives and foreign direct investments. The study applied the regression model below:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$ 

In which: Y = Foreign direct investment as measured by natural logarithm of FDI inflows on a quarterly basis

 $\beta_0$  =y intercept of the regression equation.

 $\beta_1,\ldots,\beta_4$  = are the slope of the regression

 $X_1$  = Tax incentives as measured by natural logarithm of tax incentives claimed per quarter

 $X_2$  = Inflation rate as measured by CPI

 $X_3$  = Interest rates as measured by the Central Bank of Kenya lending rate

 $X_4$  = Economic growth as measured by GDP

 $\epsilon$  =error term

# **3.4.2** Tests of Significance

The researcher carried out parametric tests to establish the statistical significance of both the overall model and individual parameters. The F-test was used to determine the significance of the overall model and it was obtained from Analysis of Variance (ANOVA) while a t-test was used to establish statistical significance of individual variables.

# **CHAPTER FOUR**

# DATA ANALYSIS, FINDINGS AND INTERPRETATION

## 4.1 Introduction

This chapter represents the study results based on the research objective. The chapter focused on the analysis of the collected data from KRA, CBK and KNBS to establish the effect of tax incentives on Kenyan FDI. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in form of tables for easy interpretation.

## **4.2 Diagnostic Tests**

Diagnostic tests were carried out on the collected data. The research assumed a 95 percent confidence interval or 5 percent significance level (both leading to identical conclusions) for the data used. These values helped to verify the truth or the falsity of the data. Thus, the closer to 100 percent the confidence interval (and thus, the closer to 0 percent the significance level), the higher the accuracy of the data used and analyzed is assumed to be. For normality test, the null hypothesis for the test was that the secondary data wasn't normal. If the p-value recorded was more than 0.05, the researcher would reject it. The results of the test are as shown in Table 4.1.

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded o-values greater than 0.05 which implies that the research data was normally distributed and therefore the null hypothesis was rejected. The data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.

# Table 4.1: Normality Test

	Kolmo	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
FDI Inflows	Statistic	Df	Sig.	Statistic	Df	Sig.		
Tax incentives	.181	40	.300	.896	40	.792		
Inflation rates	.173	40	.300	.918	40	.822		
Interest rates	.180	40	.300	.894	40	.790		
Economic Growth	.176	40	.300	.892	40	.784		
a. Lilliefors Significance Correction								

# **Source: Research Findings (2018)**

A test of Multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values less than 10 for VIF means that there is no Multicollinearity. For multiple regressions to be applicable there should not be strong relationship among variables. From the findings, all the variables had a tolerance values >0.2 and VIF values <10 as shown in table 4.2 showing that Multicollinearity does not exist among the independent variables.

# Table 4.2: Multicollinearity Test for Tolerance and VIF

	<b>Collinearity Statistics</b>				
Variable	Tolerance	VIF			
Tax incentives	0.646	1.434			
Inflation	0.398	1.982			
Interest rates	0.360	1.382			
Economic growth	0.392	1.463			

#### **Source: Research Findings (2018)**

Autocorrelation tests were run so as to check for correlation of error terms across time periods. Autocorrelation was tested using the Durbin Watson test. A durbin-watson statistic of 1.600 indicated that the variable residuals were not serially correlated since the value was within the acceptable range of between 1.5 and 2.5.

#### **Table 4.3: Autocorrelation Test**

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.815 <sup>a</sup>	.664	.626	22.180476	1.600

a. Predictors: (Constant), Economic growth, Tax incentives, Interest rate,

Inflation rate

b. Dependent Variable: FDI inflows

Source: Research Findings (2018)

## 4.4 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. Table 4.4 below shows the descriptive statistics for the variables applied in the study. An analysis of all the variables was obtained using SPSS software for the period of ten years (2008 to 2017) on a quarterly basis. FDI inflows had a mean of 49.695 with a standard deviation of 36.252. Tax incentive resulted to a mean of 5.8937 with a standard deviation of 0.0761. Inflation had a mean of 8.556 and standard deviation of 3.721. Interest rate had a mean of 15.810 and a standard deviation of 3.488.

	Ν	Minimum	Maximum	Mean	Std.
					Deviation
FDI inflows	40	17.480	210.920	49.69500	36.251814
Tax incentives	40	5.780	6.022	5.89368	.076092
Interest rate	40	13.653	20.213	15.80990	1.954510
Inflation rate	40	4.030	16.830	8.55850	3.720589
Economic growth	40	.300	12.500	6.21500	3.487895
Valid N (listwise)	40				

#### **Table 4.4: Descriptive Statistics**

#### Source: Research Findings (2018)

#### 4.4 Correlation Analysis

Pearson correlation was employed to analyze the level of association between FDI inflows and the independent variables for this study (inflation rates, interest rates, economic growth and tax incentives). From correlation analysis, the relationship between inflation and FDI inflows was found to be strong and negative (p=-.798, p<0.005). This implies that movement in the inflation rate is negatively correlated to FDI inflows and in a significant manner.

The relationship between economic growth and FDI inflows was found to be weak, positive and insignificant (p=.152, p>0.005). This implies that movement in economic growth is positively correlated to FDI inflows but not in a significant manner. The study further revealed that there is a strong positive correlation between tax incentives and FDI inflows (p=.712, p<.005). This implies that tax incentives have a strong positive association with FDI inflows and the association is significant. The relationship between interest rate and FDI inflows was found to be weak, positive and

insignificant (p=.053, p>0.005). This implies that movement in interest rates is positively correlated to FDI inflows but not in a significant manner.

		FDI	Tax	Interest	Inflation	Economic
		inflows	incentives	rate	rate	growth
	Pearson Correlation	1	.712***	.053	798**	.152
FDI inflows	Sig. (2-tailed)		.000	.745	.000	.350
	Ν	40	40	40	40	40
Tax	Pearson Correlation	.712**	1	.475**	.680***	.047
	Sig. (2-tailed)	.000		.002	.000	.776
incentives	Ν	40	40	40	40	40
	Pearson Correlation	.053	.475**	1	.201	.367*
Interest rate	Sig. (2-tailed)	.745	.002		.214	.020
	Ν	40	40	40	40	40
Inflation	Pearson Correlation	798 <sup>**</sup>	.680**	.201	1	092
	Sig. (2-tailed)	.000	.000	.214		.571
rate	Ν	40	40	40	40	40
Economi-	Pearson Correlation	.152	.047	.367*	092	1
Economic growth	Sig. (2-tailed)	.350	.776	.020	.571	
giuwui	Ν	40	40	40	40	40

# **Table 4.5: Correlation Analysis**

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

\*. Correlation is significant at the 0.05 level (2-tailed).

# Source: Research Findings (2018)

#### 4.5 Regression Analysis

FDI inflows were regressed against four predictor variables; tax incentives, inflation rates, interest rates and economic growth. The study obtained the model summary statistics as shown in table 4.6 below.

#### **Table 4.6: Model Summary**

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.815 <sup>a</sup>	.664	.626	22.180476	1.600

a. Predictors: (Constant), Economic growth, Tax incentives, Interest rate,

Inflation rate

b. Dependent Variable: FDI inflows

#### **Source: Research Findings (2018)**

Based on the outcome in table 4.5 above, R square value was 0.664, a discovery that 66.4 percent of the deviations in FDI inflows into the country are caused by changes in tax incentives, inflation rates, interest rates and economic growth. Other variables not included in the model justify for 33.6 percent of the variations in FDI inflows to the country. Also, the results revealed that there is a strong relationship among the selected independent variables and FDI inflows as shown by the correlation coefficient (R) equal to .815. A durbin-watson statistic of 1.600 indicated that the variable residuals were not serially correlated since the value was more than 1.5.

From the analysis of variance, the significance value is 0.000 which is less than p=0.05. This implies that the model was statistically significant in predicting how tax incentives, inflation rates, interest rates and economic growth affect FDI inflows in the country. Given 5% level of significance, critical value from the table is 2.74, table

4.5 above shows computed F value as 17.295. This is a confirmation that overall the multiple regression model is statistically significant, in that it is an adequate prediction model for explaining how tax incentives, inflation rates, interest rates and economic growth affects FDI inflows in the country.

 Table 4.7: Analysis of Variance

Mod	del	Sum of	Df	Mean	F	Sig.
		Squares		Square		
	Regression	34034.493	4	8508.623	17.295	.000 <sup>b</sup>
1	Residual	17219.073	35	491.974		
	Total	51253.566	39			

a. Dependent Variable: FDI inflows

b. Predictors: (Constant), Economic growth, Tax incentives, Interest rate, Inflation rate

#### **Source: Research Findings (2018)**

The study applied t-test to determine the significance of individual variables applied in this study as predictors of FDI inflows in the country. The p-value under sig. column was used to indicate the significance of the relationship between the dependent and the independent variables. At 95% confidence level, a p-value of less than 0.05 was interpreted as a measure of statistical significance. As such, a p-value above 0.05 shows a statistically insignificant relationship between the dependent and the independent variables. Table 4.8 below shows the results

# **Table 4.8: Model Coefficients**

el	Unstand	lardized	Standardized	Т	Sig.
	Coefficients		Coefficients		
	В	Std. Error	Beta		
(Constant)	-847.924	713.923		-1.188	.243
Tax incentives	154.741	128.293	.325	1.206	.236
Interest rate	-3.611	2.536	195	-1.424	.163
Inflation rate	-5.329	2.368	547	-2.251	.031
Economic growth	.467	1.114	.045	.419	.678
	(Constant) Tax incentives Interest rate Inflation rate Economic	Coeffi B (Constant) -847.924 Tax incentives 154.741 Interest rate -3.611 Inflation rate -5.329 Economic .467	CoefficientsBStd. Error(Constant)-847.924713.923Tax incentives154.741128.293Interest rate-3.6112.536Inflation rate-5.3292.368Economic.4671.114	CoefficientsBStd. ErrorBeta(Constant)-847.924713.923Tax incentives154.741128.293.325Interest rate-3.6112.536195Inflation rate-5.3292.368547Economic.4671.114.045	CoefficientsCoefficientsBStd. ErrorBeta(Constant)-847.924713.923-1.188Tax incentives154.741128.293.3251.206Interest rate-3.6112.536195-1.424Inflation rate-5.3292.368547-2.251Economic.4671.114.045.419

a. Dependent Variable: FDI inflows

# Source: Research Findings (2018)

From the above results, it is evident that of the four selected independent variables, only inflation is a significant determiner of FDI inflows as shown by a p value less than 0.05. The other variables (tax incentives, interest rates and economic growth) were found to be statistically insignificant.

The following regression equation was estimated:

 $Y = -847.924 + 154.741 \ X_1 - 3.611 \ X_2 - 5.329 X_3 + 0.467 \ X_4$ 

Where,

Y = FDI Inflows

 $X_1 = Tax$  incentives

 $X_2 =$  Interest rates

 $X_3 =$  Inflation rates

 $X_4 =$  Economic growth

On the estimated regression model above, the constant = -847.924 shows that if selected dependent variables (tax incentives, inflation rate, interest rates and economic growth) were rated zero, FDI inflows would be -847.924. A unit rise in the rate of inflation would cause a drop in FDI inflows in the country by 5.329. The other selected variables (tax incentives, interest rates and economic growth) do not have a significant influence on FDI inflows as shown by high p values.

## 4.7 Discussion of Research Findings

The study sought to determine the effect of tax incentives on FDI inflows in the country. The independent variable was tax incentives as measured by natural logarithm of total tax incentives on a quarterly basis. The control variables were interest rates as measured by quarterly CBK lending rate, economic growth as measured by quarterly GDP growth rate and inflation as measured by quarterly inflation rate. FDI inflow was the dependent variable which the study sought to explain and it was measured by quarterly FDI inflows in Kenya. The impact of each of the independent variables on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed existence of a strong negative and significant correlation between inflation rate and FDI inflows into the country (p=-.798, p<0.005). The relationship between economic growth and FDI inflows was found to be weak, positive and insignificant (p=.152, p>0.005). The study also revealed that there is a strong positive correlation between tax incentives and FDI inflows (p=.712, p<.005). The relationship between interest rate and FDI inflows was found to be weak, positive and insignificant (p=.053, p>0.005). This implies that movement in interest rates is positively correlated to FDI inflows but not in a significant manner

The model summary revealed that the independent variables: tax incentives, inflation rate, interest rates and economic growth explains 66.4% of changes in the dependent variable as shown by the  $R^2$  value meaning that this model doesn't incorporate other factors that account for 33.6% of changes in FDI inflows in Kenya. The model was found to be fit at 95% level of confidence because the F-value of 17.295 is higher than the critical value. This implies that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining FDI inflows in Kenya.

The findings of this study are in agreement with Omweri (2013) who studied the determinant factors of foreign direct investment stock in the five East African Community nations i.e. Uganda, Tanzania, Burundi, Kenya and Rwanda to find out why the region was recording very low increase of FDI. The research employed panel data analysis methods. The study used trade openness, GDP per Capita, GDP growth, telephone line (per 100 people); a proxy for infrastructural facilities, inflation, return on investment and natural resource endowment as independent variables and the stock of FDI as the dependent variable. The analyzed data was between 1991 and 2012. The study's findings showed that trade openness, inflation, and infrastructure facilities were the most crucial determent factors of foreign direct investment to EAC countries.

This study is in agreement with Okafor (2012) who studied on the value of domestic macroeconomic variables influence the Nigerian FDI inflows. Prediction that foreign capital flows could stimulate economic growth of nations is the major finding of the study. The study used ordinary least square method as an estimation technique. Foreign direct investment in Nigeria is majorly determined by real gross domestic product, interest rate, and real exchange rate as per the findings. FDI inflow is majorly

determined by domestic macroeconomic variables. The benefits and flow of the Nigerian FDI can be achieved when policy makers should strive to improve the macroeconomic environment.

# **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter shows the summary of research findings, the conclusions made from the results, and the recommendations for policy and practice. The chapter also discusses a few limitations encountered and suggestions for future research.

#### **5.2 Summary of Findings**

The study sought to investigate the effect of tax incentives on FDI inflows in Kenya. The independent variables for the study were tax incentives, inflation rates, interest rates and economic growth. The study adopted a descriptive research design. Secondary data was obtained from CBK and KNBS and was analyzed using SPSS software version 21. The study used quarterly data covering a period of ten years from January 2008 to December 2017.

From the results of correlation analysis, a strong negative correlation was found to exist between inflation rate and FDI inflows in Kenya and the correlation was significant as indicated by a p value less than 0.05. The relationship between tax incentive and FDI inflows in Kenya was found to be strong, positive and significant while interest rates had a weak negative but insignificant relationship with FDI inflows in Kenya. Economic growth exhibited a weak positive and insignificant correlation with foreign direct investment inflows as shown by a p value that was more than 0.05.

The co-efficient of determination R-square value was 0.664 which means that about 66.4 percent of the variation in FDI inflows in Kenya can be explained by the four

selected independent variables while 33.6 percent in the variation of FDI inflows in Kenya is associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with FDI inflows in Kenya (R=0.815). ANOVA results show that the F statistic was significant at 5% level with a p=17.295. Therefore the model was fit to explain the relationship between the selected variables.

The regression results show that when all the selected dependent variables (tax incentives, inflation rate, interest rate and economic growth) are rated zero, FDI inflows in Kenya would be -847.924. A unit increase in inflation rate would lead to a decrease in FDI inflows in the country by 5.329. The other selected variables (tax incentives, interest rates and economic growth) do not have a significant influence on FDI inflows as shown by high p values.

#### **5.3** Conclusion

Based on the study findings, a conclusion is made that FDI inflows in Kenya have a negative association with inflation rate. The study therefore concludes that high inflation rates lead to reduced FDI inflows in the country and to a significant extent. Tax incentives was found to have a strong positive association with FDI inflows and this study therefore concludes that an increase in tax incentives increases FDI inflows but not to a significant extent. Economic growth was discovered to be positively related to FDI inflows in the country and therefore an increase in economic growth causes an increase in FDI inflows in the country. The study found that interest rates had a negative correlation with FDI inflows in the country and we can therefore conclude that higher interest rates tend to discourage foreign direct investment inflows in Kenya.

This study concludes that independent variables selected for the study tax incentives, inflation rate, interest rates and economic growth influence FDI inflows in the country to a significant extent as they account for 66.4 percent of the changes in FDI inflows in the country. The fact that the four independent variables explain 66.4% of changes in FDI inflows in Kenya imply that the variables not included in the model explain 33.6% of changes in FDI inflows in the country. The overall model was found to be significant as explained by the F statistic. Thus it is adequate to make a conclusion that these variables significantly affect FDI inflows in the country as shown by the p-value in ANOVA summary.

This finding concurs with Omweri (2013) who studied the determinant factors of foreign direct investment stock in the five East African Community nations i.e. Rwanda, Burundi, Kenya, Uganda and Tanzania to find out why the region was recording very low increase of FDI. The research employed panel data analysis methods. The study used trade openness, Gross Domestic Product per Capita, Gross Domestic Product growth, telephone line (per 100 people); a proxy for infrastructural facilities, inflation, return on investment and natural resource endowment as independent variables and the stock of foreign direct investment as the dependent variable. The analyzed data was between 1991 and 2012. The study's findings showed that trade openness, inflation, and infrastructure facilities were the most crucial determent factors of foreign direct investment to EAC countries.

## **5.4 Recommendations**

The study established that there is a negative and significant influence of inflation rate on FDI inflows in the country. This study recommends that there is need for policy makers to regulate the inflation levels prevailing in the country bearing in mind that they influence FDI inflows in the country. Economic growth was found to have a positive effect on FDI inflows and therefore this study recommends that policy makers should develop measures to boost economic growth as it attracts FDI

The study found that tax incentives have a positive influence on FDI inflows in the country. This study recommends that policy makers should encourage foreign direct investments by increasing tax incentives. Interest rate was found to have a negative relationship with FDI inflows in the country. The variables were however found to be insignificant determinants of FDI inflows in the country. This study recommends that policy makers should pay attention to the prevailing rates of interest as they can negatively affect FDI inflows in the country.

#### 5.5 Limitations of the Study

The scope of this research was for ten years 2008-2017. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2017. A longer study period is more reliable as it will take into account major economic conditions such as booms and recessions.

Data quality is one of the study limitations. The data that has been used is only assumed to be accurate. The measures used may keep on varying from one year to another subject to prevailing condition. The study used secondary data that had already been obtained and was in the public domain, unlike the primary data which is first-hand. The study also considered selected determinants and not all factors affecting FDI inflows mainly due to limitation of data availability.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

#### 5.6 Suggestions for Further Research

This study focused on tax incentives and FDI inflows in Kenya and relied on secondary data. A research study where data collection relies on primary data i.e. indepth questionnaires and interviews covering the different sectors that receive FDI is recommended so as to complement this research.

The study was not exhaustive of the independent variables affecting FDI inflows in Kenya and this study recommends that further studies be conducted to incorporate other variables like money supply, cost of labour, technological advancement, education levels, political stability and other macroeconomic variables. Establishing the effect of each variable on FDI inflows will enable policy makers know what tool to use when controlling FDI inflows.

The study concentrated on the last ten years since it was the most recent data available. Future studies may use a range of many years e.g. from 1970 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing in Kenya. The recommendations of this study are that further studies be conducted on other contexts such as other East Africa countries. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used in explaining the various relationships between the variables.

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# **APPENDICES**

# Appendix I: Research Data

Year	Quarter	FDI	Interest	Tax	Inflation	Economic
		inflows	rate	incentives	rate	growth
2008	1	24.370	13.893	5.780	5.870	3.100
	2	31.220	13.993	5.785	5.390	3.500
	3	19.780	13.740	5.791	5.380	0.400
	4	23.220	14.440	5.791	5.040	3.700
2009	1	33.660	14.773	5.796	4.710	5.600
	2	49.220	14.883	5.803	4.560	5.400
	3	17.480	14.763	5.804	4.160	10.100
	4	17.890	14.797	5.806	4.030	7.700
2010	1	18.230	14.920	5.799	6.010	5.700
	2	18.360	14.477	5.808	6.390	7.300
	3	18.470	14.150	5.810	6.400	10.400
	4	22.560	13.890	5.807	6.430	12.500
2011	1	24.360	13.903	5.847	6.470	12.500
	2	25.440	13.957	5.852	6.480	4.200
	3	25.990	14.417	5.859	6.590	2.300
	4	27.070	15.573	5.861	6.660	0.300
2012	1	39.470	15.620	5.869	6.670	0.300
	2	42.190	15.977	5.882	6.780	2.200
	3	42.270	16.083	5.898	6.830	7.200
	4	42.290	16.403	5.908	6.840	1.200
2013	1	42.390	16.540	5.907	6.980	10.700
	2	47.240	16.677	5.911	7.240	10.000
	3	48.790	16.947	5.918	7.260	7.100
	4	49.200	16.960	5.929	7.720	5.200
2014	1	52.180	17.000	5.926	7.850	7.300
	2	52.680	17.347	5.928	8.150	7.200
	3	52.700	17.430	5.936	8.320	8.500
	4	53.430	17.900	5.953	8.630	10.200

Year	Quarter	FDI	Interest	Tax	Inflation	Economic
		inflows	rate	incentives	rate	growth
2015	1	54.850	17.920	5.950	9.020	10.100
	2	59.450	17.927	5.954	10.300	8.800
	3	62.290	18.147	5.964	10.700	11.800
	4	62.420	18.323	5.972	11.920	7.000
2016	1	65.110	20.003	5.970	12.780	8.100
	2	66.020	20.053	5.977	13.390	7.900
	3	66.670	20.213	5.982	14.300	6.800
	4	79.830	13.687	5.990	15.220	4.000
2017	1	89.930	13.653	5.992	15.830	4.700
	2	210.920	13.660	6.002	16.830	3.500
	3	150.670	13.680	6.008	16.290	1.700
	4	57.490	13.677	6.022	15.920	2.400