EFFECT OF TRADE OPENNESS ON FOREIGN DIRECT INVESTMENTS IN KENYA

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DECLARATION

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

Signed: _____ Date: 14th November 2022

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

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DEDICATION

This research project is dedicated to my family and friends for their great support and encouraging me to work hard, and lastly to my colleagues for creating an enabling environment for me to carry out this project.

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LIST OF ABBREVIATIONS

ANOVA   Analysis of Variance

ARDL   Auto Regressive Distributed Lag

BRICS   Brazil, Russia, India, China, and South Africa

CBK   Central Bank of Kenya

CLRM   Classical Linear Regression Model

FDI   Foreign Direct Investments

GDP   Gross Domestic Product

IMF   International Monetary Fund

KNBS   Kenya National Bureau of Standards

NEG   New Economic Geography

OECD   Organization for Economic and Cooperation Development

OLS   Ordinary Least Squares

SDG   Sustainable Development Goals

SPSS   Statistical Package for Social Sciences

SSA   Sub-Saharan Africa

UNCTAD   United Nations Conference on Trade and Development

VIF   Variance Inflation Factors

ABSTRACT

Kenya launched its 2030 vision in 2008 with the goal, among other things, of attaining global competition for FDI and economic growth. Inconsistent FDI inflows have occurred in Kenya since the 1970-1980s. In response to structural shifts and industry trends, Net FDI was extremely unpredictable and generally diminishing in the 1980s and 1990s. The objective of this research was to determine the effect of trade openness on Kenya's FDI inflows. The study was based on internalization theory, monopolistic advantage theory and new economic geography theory. The independent variable was trade openness while the control variables were; interest rate, inflation and economic growth. The dependent variable that the research attempted to explain was the FDI inflows in Kenya. The data was obtained on a quarterly basis for a duration exceeding twenty years (from January 2002 to December 2021). A descriptive research approach being utilized in the research, with a multivariate regression model utilized in examining the link between the research variables. The research conclusion depicted a 0.271 R-square value, signifying that the selected independent variables can describe 27.1 percent of the variance in Kenya's FDI inflows, whereas the other 72.9 percent was attributable to other factors not surveyed in this research. The F statistic was significant at a 5% level with a p=0.000. This proposes that the model was satisfactory for explanation FDI inflows in Kenya. Further, the results demonstrated that trade openness had a positive and significant influence on Kenya's FDI inflows. Interest rate and inflation had no significant influence on Kenya's FDI inflows. Economic growth had a significant positive influence on FDI inflows in Kenya. The study recommends the need for practitioners and policy makers to ensure that the level of trade openness keeps on improving as this will enhance FDI inflows into the country. Policy makers should also aim at developing policies aimed at ensuring sustainable economic growth as this is an important determiner of FDI inflows. Future studies can focus on other determinants of FDI in Kenya such as corruption, financial development among others. Future studies can also focus on other countries in the East Africa Community to confirm the findings.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Inflows of foreign direct investment (FDI), one of the main forces behind globalization, are thought to perform an extremely key part in the economic advancement and development of nations. FDI generally performs a substantial role in the growth of host nations, bringing with it resources like as finance, external financing, infrastructure, technology, skills, as well as market access (Adow & Tahmad, 2018). Trade openness is important for evaluating the nation's export-import balance and is seen as a major factor of FDI inflows. The level of output and economic activity is impacted by globalization and trade policies that are more open to international investment. Determining how much the trade policies have been liberalized is crucial (Makoni, 2018).

This research was anchored on internalization theory by Casson and Buckley (1976) which recognizes existence of certain factors in the host nation which establish if foreign direct investment inflows presence or not. The current study will use the theory to establish whether trade openness is one of these factors. Other supporting theories include monopolistic advantage theory by Hymer (1960) which recommends that imperfect competition in the production factor market is the vital origin of FDI. Krugman (1991), new economic geography theory postulates that locational advantage is a key factor which makes a country attractive and most multinational will seek to invest in a country with locational advantages which are favorable for investments.

Kenya is one of Africa's Sub-Saharan economies with a fast growing economy registering an average 5.4% annual growth, making it the East Africans largest economy but still lags behind the satisfactory economic growth of at least 7% that is

required in attainment of sustainable development goals that are made probable by a flourishing private sector that is key to reducing poverty (World Bank, 2019). Additionally, the rate is substantially below the envisioned economic growth rate of 10% per year set forth in the Vision 2030 economic pillar (Trading Economics, 2016). FDI has been on the decline since independence, this is pronounced in key employment creation sectors such as agricultural sector (9.3% decrease), Business services sector, (15.6% decline) as well as manufacturing sector (7.8% decline) (Kinyanjui, Muturi & Njeru, 2018). The major challenge facing the government today is how to stimulate FDI so as to attaining the desired level of economic growth that is useful in achievement of sustainable development goals (SDGs), poverty reduction, vision 2030 and the Big Four Agendas. This study will therefore offer a suitable guide to policymakers on the effect of trade openness on FDI.

1.1.1 Trade Openness

Trade openness refers to rise in human society integration of economic activities globally. Additionally, it might hasten the development of denationalization of more advantageous political as well as social endeavors that permit the movement of wealth across international borders (Igudia, 2004). The increasing amount and diversity of cross-border transactions, global financial flows, and quick and persistent technical progress all contribute to the growing economic interdependence of all nations (Shah & Khan, 2016). As per Chakrabarti (2001), trade openness reveals how simple it is for investors to transfer money inside and between nations, and this definition will be used in the current research.

The rationale for trade openness has been based on two potential benefits. The first is the quantity effect, which is represented by higher levels of investment and savings in

an economy, and the second is the quality effect, which is represented by a more effective distribution of capital (Abiad, Oomes & Ueda, 2015). McKinnon (1973) and Shaw (1973) explain that in protected financial markets, financial repression may be lessened through trade openness, enabling the real interest rate to rise to its equilibrium level in the market. Additionally, the relaxation of capital regulations enables both domestic and foreign investors to diversify their portfolios more, which reduces the cost of capital and increases the availability of funds.

Regarding operationalization, Adeyeye, Aluko, Fapetu and Migiro (2017) classifies trade openness in terms of exports and imports in a given country. A trade openness index is introduced by Abiad, Oomes, and Ueda (2015) that takes into consideration regulations, privatization, entry barriers for banks, credit controls, interest rate controls, and limits on cross-border financial transactions. In the current research, trade openness was measured in terms of the total of imports and exports standardized by gross domestic product. This is the most widely used and practical measurement, and it has been employed in numerous worldwide research (Adow & Tahmad, 2018; Zaman et al., 2018).

1.1.2 Foreign Direct Investments

Foreign direct investment is a type of cross-border investment made by someone who lives in one country with the aim of obtaining a long-term stake in a firm situated in a diverse country (OECD, 2008). The share acquisition by a company in a multinational that surpasses a 10% threshold, indicating managerial presence in the foreign enterprise, is another definition of FDI (Goldin & Reinert, 2007). FDI has been defined by International Monetary Fund (IMF) (1993) as an investment intended to obtain profit

by the firms operating in different countries from the investor. The current study defines FDI as the establishment of a lasting interest by foreign firms in Kenya.

FDI is a crucial element for supporting growth of an economy, as a result of this; capital deficient economies thus suffer from low realized FDI due to scarce local resources. FDI play the role of creating employment and thus increasing local income, which then leads to stimulation of local aggregate demand. An increase in local aggregate demand impacts significantly aggregate production output via a multiplier process. Further to that, an increase in investments can also enhance the economy productive capacity, and thereby boost the available capital stock and enhance economic growth of a country (Ali, 2014). Lack of capital thus inhibits the achievement of important goals of economic development like alleviation of poverty, equal wealth distribution and increased employment levels; a feat only achievable through sustained levels of FDI that enhance growth (Chorn & Siek, 2017).

Previous researchers have operationalized Foreign Direct Investment in different ways. Xgedu (2013) has summarized FDI into four main categories including horizontal FDI, vertical FDI, green field business, and transnational mergers & acquisitions. Mowlaei (2018) operationalized FDI as an aggregate of the various types of FDIs. Lozi and Shakatreh (2019) measured FDI as the total value of FDI inflows going into a specified country on an annual basis. The current study adopted this definition and therefore measured FDI as the natural logarithm of the total value of FDI inflows into Kenya in a given quarter.

1.1.3 Trade Openness and Foreign Direct Investments

Theoretically, depending on the trade policies of the host nation, trade openness has a positive or negative effect on FDI (Liargovas & Skandalis, 2012). Trade openness is

regarded to be an important factor in FDI inflows determination and is valuable for analyzing the export-import balance of the nation when trade policies are effective. The level of output and economic activity is impacted by globalization and trade policies that are more open to international investment. Determining how much the trade policies have been liberalized is crucial (Makoni, 2018).

Trade openness impact on foreign direct investments incline to be presented as either positive or negative (Ashraf, 2017). By restricting the openness of the capital markets, the literature advancing the neoliberalism ideology suggests that liberalization may have positive effects This body of work makes the notion that removing statutory barriers to foreign investment alone is insufficient to reap the benefits of trade openness. The accessibility of knowledge, investor protection, country risk, and compatibility across various economic and political sectors should all be inspiration instruments to promote foreign investment (Naghavi & Lau, 2016).

Most empirical research have discovered a connection of trade openness and FDI inflows that is positive (Makoni, 2018). This point of view contends that a nation with fewer import and export restrictions has a better chance of luring FDI given the positive link amongst trade openness and FDI. Research has revealed a link amongst trade openness and FDI inflow that is negative (Adow & Tahmad 2018). Wickramarachchi (2019) also discovered that trade openness had no substantial effect on FDI inflows in the BRICS countries (Brasil, Russia, India, China, and South Africa).

1.1.4 Trade Openness and Foreign Direct Investments in Kenya

Kenya has a long-standing rich past, with multinational companies since the 1960s. Kenya has long been known as an enticing location for foreign investors to invest in East and Central Africa. In Kenya a host of multinationals, such as Proctor and Gamble,

General Motors, Microsoft, Google, Coca-Cola Citibank, Ogilvy and Mather, still act as the East African market center of choice. Foreign investment accounts for approximately 51 percent of the country's total banking assets (CBK, 2020). Thanks to its integration with global hubs and its trained and skilled staff, fiscal benefits, advanced financial structures, built infrastructure and regional trade strategic memberships and cooperation agreements, Kenya is considered a productive hub for the country (World Bank, 2019).

Notably, Kenya's foreign direct investments have continued to perform below expectations (Gitonga, 2017). According to Wekesa et al. (2016), if the government is to attain the anticipated 10%, economic growth by attracting the required level of FDI it means that it must put in place an enabling environment through enacting appropriate macroeconomic policies. To do this however it is important to know which of the macroeconomic variables play the bigger role in enticing foreign direct investment and maintaining them at the desire level for best results, hence the need for this study.

Kenya launched its 2030 vision in 2008 aiming, among other things, attaining global competition for FDI and economic growth. Inconsistent FDI inflows have occurred in Kenya since the 1970-1980s. In response to structural shifts and industry trends, Net FDI was extremely unpredictable and generally diminishing in the 1980s and 1990s (UNCTAD, 2018). The purpose of this research is to determine whether Kenya's current level of trade openness is effective in enticing FDI inflows.

1.2 Research Problem

It is expected that trade openness will have a mixed effect on FDI inflow. Presumably, based on the trade policies of the host nation, trade openness has a positive or negative impact on foreign direct investment (Liargovas & Skandalis, 2012). First, the vast

majority of empirical studies have revealed a link amongst trade openness and FDI inflows that is positive (Makoni, 2018). This point of view contends that a nation with fewer import and export restrictions has a better chance of luring FDI given the positive association of trade openness and foreign direct investment. Second, some research has revealed a conflict of trade openness and FDI inflow (Adow & Tahmad 2018). Thirdly, Wickramarachchi (2019) discovered that FDI inflows to the BRICS countries were not significantly impacted by trade openness.

Kenya possesses a long running rich tradition with international companies since 1960s. Kenya has been seen for years as a desirable location for international investors who want to invest in the broader region of East as well as Central Africa. Though, the nation has also seen multinational corporations with well-developed country leaving operations in unpredictable situations and this has adversely affected FDI inflows into the region. In 2014 Eveready East Africa shut down its Nakuru factory for importing batteries from its Egyptian branch after strong competition from cheap illegally imported goods, two weeks later Cadbury Kenya declared it a halt on the Kenyan market. Their factory was decreed to be decrying inexpensive and subsidized imports in September 2016. Procter and Gamble, Bridgestone, Unilever, Johnson and Johnson, Reckitt Benckiser, and Colgate Palmolive are other firms which have meanwhile exited Kenya in alternative markets (UNCTAD, 2018). Experts have linked these exits to government policies and this analysis would aim to examine if actually trade openness which is part of government policy affects FDI inflows.

Globally, studies have focused on trade openness and FDI relationships with mixed findings. Lien (2021) research on trade openness impact on FDI inflows into Vietnam. The outcomes shows that the trade openness has a positive effect on FDI.

Mudiyanselage, Epuran and Tescașiu (2021) investigate the causal link amongst trade openness and FDI inflows in Romania. The findings indicate that FDI inflows in Romania had both long- and short-term negative, statistically significant relationships with trade openness. Mohammed and Hayewa (2020) aimed to investigate how trade openness affected FDI in Sub-Saharan Africa nations. The findings reveal that trade openness positively and statistically significant influence FDI in the region. A contextual gap is shown in this study as they were undertaken in different contexts from Kenya which is the current research focus.

Locally, the available researches have mostly focused on other determinants of foreign direct investments without addressing trade openness. Other studies have focused on the impact of FDI on economic growth. Ogero, Obere and Odada (2021) pursued to establish macroeconomic variables effect on FDI inflows in Kenya. Economic growth and exchange rates are substantial in prompting FDI level but trade openness was not taken into account. Ong'ondo (2018) pursued to investigate foreign capital flows impact on Kenya's economic growth. The study concluded that increases in FDI positively increased GDP. Wekesa, Wawire and Kosimbei (2016) examined in Kenya the influence of infrastructure development on FDI and revealed that communication infrastructure, water and waste infrastructure, transport infrastructure and trade openness are significant factors of FDI inflows into Kenya.

From the aforementioned reviews of local, regional, and international studies, it is clear that the majority of studies yield contradictory results, with some swinging from a negative to a positive direction and others showing no association at all. Additionally, the researchers used various approaches and were conducted in various circumstances, making it challenging to generalize the results to one specific context. Additionally, the

available studies have not documented the interactions among trade openness and FDI in Kenya therefore leaving empirical literature gap. This yields to the research question: What is the effect of trade openness on foreign direct investments in Kenya?

1.3 Research Objective

The objective of this study was to establish the effect of trade openness on foreign direct investments in Kenya.

1.4 Value of the Study

This research results will contribute to the existing theoretical as well as empirical literature on trade openness and foreign direct investments. The results will also aid in theory creation because they will shed light on the limitations and applicability of the existing theories to the study's variables. On the basis of the advice and ideas for additional research, additional investigations may also be conducted.

The conclusions of this research will be crucial for practitioners like portfolio managers and private equity managers who engage in global investing. The study will assist these supply-side managers in deciding where to deploy capital into foreign economies that would maximize their expected return on investments. It would also help them in singling our foreign markets that possess underlying characteristics that enable a conducive environment for international capital to thrive and easily repatriate back profits.

The research will also be helpful to organizations that make policy, such as governments, capital markets, central banks, and economic bodies that create varied trade openness and FDI policies. The study's recommendations may also be used by the decision-making organizations to develop efficient trade openness tactics that will increase FDI.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses the theories that form the basis for trade openness and foreign direct investments. It also reviews the prior empirical research, identifies knowledge gaps, and de a conceptual framework and hypotheses illustrating the anticipated link between the variables under consideration.

2.2 Theoretical Framework

This section studies the theories that back the research of trade openness and FDI. The study reviewed the internalization theory, monopolistic advantage theory and new economic geography theory.

2.2.1 Internalization Theory

This was created by Casson and Buckley (1976) and serves as the study's anchor theory. Hennart (1982) additionally evolved the theory and learned from subsequent studies by Casson (1983). The theory outlines the development and inspiration of multinationals. It reveals that multinational companies plan their internal operations in order to obtain unique advantages and leverage them to improve their productivity. According to Hymer (1960), FDI can only occur where the utilization of a firm-specific benefit supersedes the marginal cost of foreign investment. In short, he suggests that FDI happens in unstable markets, and it is actually a firm-level policy judgment as opposed to a capital-market financial decision.

Casson and Buckley (1976) claim that an FDI is desirable only if the requirements of possession, place, and internalization are satisfied. Firstly, the company would have a competitive edge over the ownership of the local business. This could be in the context

of the corporate or technical expertise unique to the multinational. Government regulations that are likely to change the advantages of investment in a given host country are also important. In some situations, the host government can lay down rules on the existence of foreign ownership. In addition, such constraints limit the inward FDI inflows that would be followed by technology. Second, manufacturing in the home country would be beneficial for multinationals as well as other buyers if they can take advantage of any competitive locational advantage. Instead of renting or purchasing from other businesses, it should be appropriate to carry out the operations within the host countries.

Dragoi (2019) critiques the theory because it unrealistically assumes rationality of investors and frictionless markets where investors have all the required information. The theory also ignores the technology's contribution to growth. The theory has over the years further been developed to accommodate an open economy, but however still attributes the inability of an economy to develop squarely on its failure to save and accumulate capital. This theory is appropriate to the current research since it recognises that there are some elements in the host nation that affect whether or not there will be inflows of FDI. The goal of this research was to assess whether trade openness is a factor in FDI inflows.

2.2.2 Monopolistic Advantage Theory

Hymer (1960) developed this theory, that holds that monopolistic benefits of businesses result from the product market's partial advantages and that the factor market, which trusts the businesses, can acquire and maintain several monopolistic strengths in FDI to generate high profitability compared to local businesses because there is imperfect competition. Economies of scale and the benefits of management expertise result in

low-cost operational efficiencies (Gillen & Lall, 2004). The monopolistic advantage theory has built the basement for the later study and development of FDI.

Pei and Zheng (2011) contend that both the domestic and international regions contribute to the firms' competitive edge. The ability to compete internationally can be improved by active involvement in the industry structure and policy enticements of the home nation. The advantages of the domestic firm are promoted by its industrial advantage, national image, scale advantage as well as cultural advantage. In this respect, the national image contains crucial components needed to develop the motherland's monopolistic advantage, that will encourage the nation to give the national image more attention.

The theory has been critiqued as it does not describe the benefit a firm should focus on since apart from monopolistic advantages (Nayak & Choudhury, 2014). The monopolistic advantage theory is used in this research since it expands the area of research into international direct investment and challenges the FDI analysis model from the perception of capital flow by arguing that FDI is primarily driven by imperfect competition in the market for production factors. Monopolistic advantages possessed by multinational companies generally have technological advantages, fund raising advantages, economies of scale advantages, management advantages, and monopolistic advantages resulting from incomplete product markets.

2.2.3 New Economic Geography Theory

This theory was pioneered by Krugman (1991). It holds that business location tends to be influenced by demand for products or by large market, which help them to minimize transportation costs. The theory postulates that locational advantage is a key factor which makes a country attractive and most multinational will seek to invest in a country

with locational advantages which are favorable for investments. Further, in support of the New Economic Geography (NEG), Devereux, Maffini and Xing (2015) posit that trade openness will have more impact in countries with already established foreign investments compared to countries with fewer or no foreign investments.

The NEG theory has been critiqued as it contradicts the central assumption of the neoclassical investment theory as to the value of trade openness on expenditure. The model indicates that lower trade barriers foster the growth of FDI among international business entities. Thus, the distribution of FDI can be calculated by a country's geographical position. This according to Venables (2005) gives NEG theory a holistic approach to spatial economics that explain movement of FDI. These clattering forces, due to FDI flows generate uneven allocation of economic activities among countries. This leads to emergence of regional disparities, new cities and this eventually brings in international inequalities. The theory demonstrate that easy access to the market create incentives to firms because of reduction in transport costs and as such determines international competitiveness of a country (OECD, 2008).

According to Ottaviano (2003), the power of regional policy will depend on the level to which trade integration has taken place. Therefore there is need to reduce trade barriers in order for fiscal policies to be effective. Globalization has made cross border trading easy and multinationals are able to sell their goods across bounders. The theory may therefore, be used in explaining movement of FDI in the advent of globalization and regional community integrations.

2.3 Determinants of Foreign Direct Investments

Foreign direct investment inflows in a given nation are predisposed by several factors. Some of the factors that have been identified in previous literature as determiners of

FDI inflows include trade openness, economic growth, inflation and interest rates prevailing in a given country.

2.3.1 Trade Openness

Presumably, depending on the trade policies of the host nation, trade openness has a positive or negative effect on FDI (Liargovas & Skandalis, 2012). Trade openness is regarded to be an important factor in FDI inflows determination and is valuable for analyzing the export-import balance of the nation when trade policies are effective. The level of output and economic activity is impacted by globalization and trade policies that are more open to international investment. Determining how much the trade policies have been liberalized is crucial (Makoni, 2018).

Trade openness impact on foreign direct investments incline to be presented as either positive or negative (Ashraf, 2017). By restricting the openness of the capital markets, the literature advancing the neoliberalism ideology suggests that liberalization may have positive impact. This body of work makes the notion that removing statutory barriers to foreign investment alone is insufficient to reap the benefits of trade openness. The availability of knowledge, country risk, investor protection, and compatibility across various economic and political sectors should all be inspiration instruments to promote foreign investment (Naghavi & Lau, 2016).

2.3.2 Interest Rates

Interest rate significantly influences the setting of prices for products and services at the local level and even internationally. Money supply occurring in the thrift will significantly impact interests. An example, when the entire economy is enjoying abundance of money, interest rates will in most cases start decreasing impacting the

way business functions. Barksenius and Rundell (2012) say that this consequently makes the economy flourish and attract outsiders to come and invest.

Interest rates define the economic improvement. An unforeseen shift in the interest rates affects the investment decisions, where, investors may change their savings arrangements, like shifting to specified profit instruments from the capital market (Barnor, 2014). Khan and Sattar (2014), state that FDI can be affected either negatively or positively by the interest rates according to the motion. Savings are disheartened when interest rates on deposits are lowered and there is a consumption rise.

2.3.3 Inflation Rate

Inflation rates are among the factors that can have a great impact on the economy of a particular state. An example, when prices are increasing properties will become costly. Thus, when an economy is undergoing through inflation, the cost of average products and services also rises. Because of this, the purchasing power of people will lower and consequently impact financial development. Due to this fact, a lot of investors that take part in the enterprise of products and services will always allow a room for inflation in their decisions (Biller, 2007).

Increased inflation rates imply that prices of products will be reasonably high for consumers which make them consume less and in turn reduce the profits of the firms. These high prices to a point also activate occurrence of high rates of interest as put across by Hendry (2016). Mostly, inflation possess negative impact on the economy and it is therefore associated to market performance in a positive way (Fama, 1998). Therefore, growth should be related to the expected price level in a negative way, where short-term rate of interest represent the international fisher effect.

2.3.4 Economic Growth

Economic growth is viewed as an important overall measure of an economy's wellbeing. It is thus used to track the overall economic growth trend of an economy over time and can thus be used to track the effectiveness of economic policies instigated with an aim of enhancing growth overtime. Achieved positive economic growth may help in the realization of various macro-economic objectives that include poverty reduction, increased employment, public services improvement and reduced debt balances to GDP ratios (Phimmarong & Kinnalone, 2017).

Economists have often recognized that capital is a key component of enhancing economic growth, via its deployment to productive investments. Capital is thus required for both public and private sector investments that enhance local economic growth. Public investments include infrastructure projects that support and stimulate growth, along with employment creating public projects that reduce poverty by increasing incomes and thereby raising standards of living. The private sector requires capital for such needs like supplementing production resources and expanding business activity (Onyinye, Orji, Jonathan & Emmanuel, 2018).

2.4 Empirical Review

Locally and globally studies have established the link amongst trade openness and foreign direct investments, the objectives, methodology and outcomes of these studies are discussed.

2.4.1 Global Studies

Lien (2021) investigates how trade permeability affects FDI inflows into Vietnam. The study examined the effect of trade openness on FDI in Vietnam from 2005 to 2019 using the vector autoregression model. The research data span the quarters 2005: Q4

through 2019:Q3, and are time-series data with quarterly frequency. The International Financial Statistics aided in gathering the FDI data. Based on data on Vietnam's export, import, and GDP gathered by the General Statistics Office of Vietnam, the data on trade openness were derived. The estimated outcome demonstrates that trade openness influences FDI positively. Due to the fact that this survey was carried in Asian economies, which have distinct economic and social environments than Kenya, there is a contextual gap.

Mudiyanselage, Epuran and Tescașiu (2021) investigate the causal association amongst trade openness and FDI inflows in Romania. The study period ranged between 1997 and 2019. The primary independent variable is trade openness, while the control variables are GDP, inflation, real effective exchange rate, and level of education. It was decided to use the Auto Regressive Distributed Lag (ARDL) Bounds test method. In Romania over the timeframe, FDI inflows had negative, statistically significant long-term and short-term correlations with trade openness. Due to the fact that it was carried out in a developed economy, the study has a contextual gap.

Mohammed and Hayewa (2020) sought to look into trade openness impact on FDI in Sub-Sahara African nations for the 2000 to 2017 duration. The fully modified least squares approach, panel unit root test, and panel co integration test were all used in the study's panel data analysis. The outcomes show that all of the variables had long-term relationships and were cointegration of order one. More specifically, the findings indicate that whereas corruption was negatively and statistically significant in impacting FDI in the region, trade openness was positively and statistically significant in influencing FDI. The research has a methodological gap because it used a panel instead of a time series model in the current study.

Musabeh and Zouaoui's (2020) study looked at the factors that affected FDI inflows and the effects of the FDI policies implemented by the North African host nations of Egypt, Morocco, Algeria, Libya, and Tunisia between 1996 and 2013. The independent factors have been divided into three categories: economic, institutional, and political, with two different types of investment programs. In the model, the following independent variables were included: market size, investment freedom, investment agreement, trade openness, gross fixed capital creation, natural resources, infrastructure, exchange rate stability, inflation, corruption perception index, regulation, and political limitations index. The findings showed that the rise of FDI inflows was positively and statistically significantly correlated with trade openness. Nevertheless, there was no substantial or negative correlation between the variables of natural resources and market size and changes in FDI inflows in the North African nations. This research offers a methodological gap as it employed OLS which has its shortcomings, a fixed or random effects model would have been more appropriate.

Makoni (2018) chose nine African nations between the years of 2009 and 2016 to studied the impact of trade openness on FDI in those nations. The ratio of net foreign direct investment to GDP, real exchange rate, trade openness, infrastructure, macroeconomic stability (measured as a proxy for real economic growth), endowment of natural resources, and capital openness were all considered to be independent variables. The dependent variable was the ratio of net FDI inflows to GDP. The research used a variety of econometric methods, including generalized least squares, fixed effects models, random effects, and pooled OLS. The outcomes of the random effects model showed that FDI and trade openness were positively correlated, while capital openness was positively correlated but not significantly so. This study shows a

conceptual gap as it measured trade openness in terms of capital openness and trade openness without taking into account the summation of exports and imports.

2.4.2 Local Studies

Ogero, Obere and Odada (2021) aimed on establishing the link amongst FDI and chosen macroeconomic variables. The unit root test is used in the research to assess each variable's stationarity. The Granger causality test is used to determine if macroeconomic variables are causally related to FDI inflow. Foreign direct investment levels are significantly influenced by economic growth and exchange rates, while interest rates are significantly influenced by inflation and exchange rates. Gross domestic product growth is a good indicator of economic health and a key factor in determining how quickly foreign direct investment comes into a country. The study brings out a conceptual gap as it did not consider trade openness and it is effect on foreign direct investments.

Ong'ondo (2018) carried out research to investigate the impact of foreign capital flows on Kenya's economic growth. The research utilized a quantitative research design and utilized secondary data over a 25 years duration from 1993 to 2017. The study employed a time series model and also conducted univariate regression analysis. The study concluded that increases in FDI, FPI, external commercial borrowings and deposits from non-resident Kenyans all positively increased GDP. The recognized the Governments' role in pursuing policies attracting and encourage net increases in FCF into the country. A shortcoming of the study is that it did not methodologically review the potential effect of regime change due to the lengthy 25 years period of study. The period covered had instances of global financial crises and turmoil, and thus a need to evaluate the period as time lapses in the short term as well as long term.

Waweru and Ochieng (2017) examined the immediate and lagged effect of FDI flows on economic growth of Kenya. The study period was from 1984 to 2014, representing a 30-year period. The study applied a quantitative research design. This was an econometric model form also referred as the Auto Regressive Distributed Lag Model (ARDLM). The study results were that portfolio investments flows and foreign direct investments have had a negatively statistically insignificant effect on the GDP growth rate. Further, other investments flows, have had a positive and statistically significant effect on economic growth. The study presents a conceptual gap as the effect of trade openness on FDI was not determined.

Muigai and Muturi (2017) inspected FDI inflows influence on Kenya's economic growth. The study period was from 2000 to 2015 and used panel data collected using a data collection sheet. A causal research design and Ordinary Least squares method were used. The findings established that there was a weak influence of FDI inflow and GDP of Kenya. To increase the effect of FDI on economic growth, the study posited that the government needs to direct foreign resources to more productive areas in the economy. The study also revealed a negative association amongst foreign debt and economic growth of Kenya. The research presents a conceptual gap as the effect of trade openness on FDI was not determined.

Wekesa, Wawire and Kosimbei (2016) examined the effect of infrastructure improvement on FDI in Kenya. It can be determined by using multiple regression analysis that improvements to Kenya's communication, water, and waste systems, transportation infrastructure, exchange rate, economic development, and trade openness are significant drivers of FDI inflows. Therefore, continual infrastructure is important because good infrastructure provides investors a helpful investment

environment to do business. However, the discovery in this research may not be applied to the other countries of SSA region. This research offers a conceptual gap as it focused on infrastructure development.

2.5 Summary of the Literature Review and Research Gaps

The theoretical reviews depicted the projected link between trade openness and foreign direct investments. Key influencers of foreign direct investments have been discussed. Knowledge gap is evident that has to be filled based on the research that have been examined. Various conclusions about the link amongst trade openness and FDI have been drawn from the studies that have been analyzed. Conceptual, contextual, and methodological gaps can explain the disparities from the studies.

Conceptually, most of the research performed locally have operationalized trade openness in diverse manner, with the mainstream selecting for a constrained definition. This presents conceptual gaps that the current study intends to fill. There are also methodological gaps that arise from previous studies conducted locally; most of them were conducted for a short period of time (mostly five years) which might not be adequate to capture the effect of trade openness on financial performance. The current study will consider a 20-year period with data collected quarterly. Additionally, local studies mostly have focused on other determinants of FDI without taking into account trade openness.

2.6 Conceptual Framework

Displayed in figure 2.1 is the projected link amongst the variables. The predictor variable was trade openness given by country's exports and imports to GDP. It was theoretically hypothesized that an increment in trade openness translates to a rise in foreign direct investments. The control variables were inflation given by inflation rate,

interest rate given by average lending rate and economic growth given by GDP growth rate. The response variable was foreign direct investments given by log FDI inflows.

Independent variables   **Dependent variable**

Trade openness
- The ratio of exports and imports to GDP

Foreign direct investments
- Log FDI inflows

Control Variables
Interest rate
- Average lending rate

Inflation
- Inflation rate

Economic growth
- GDP growth rate
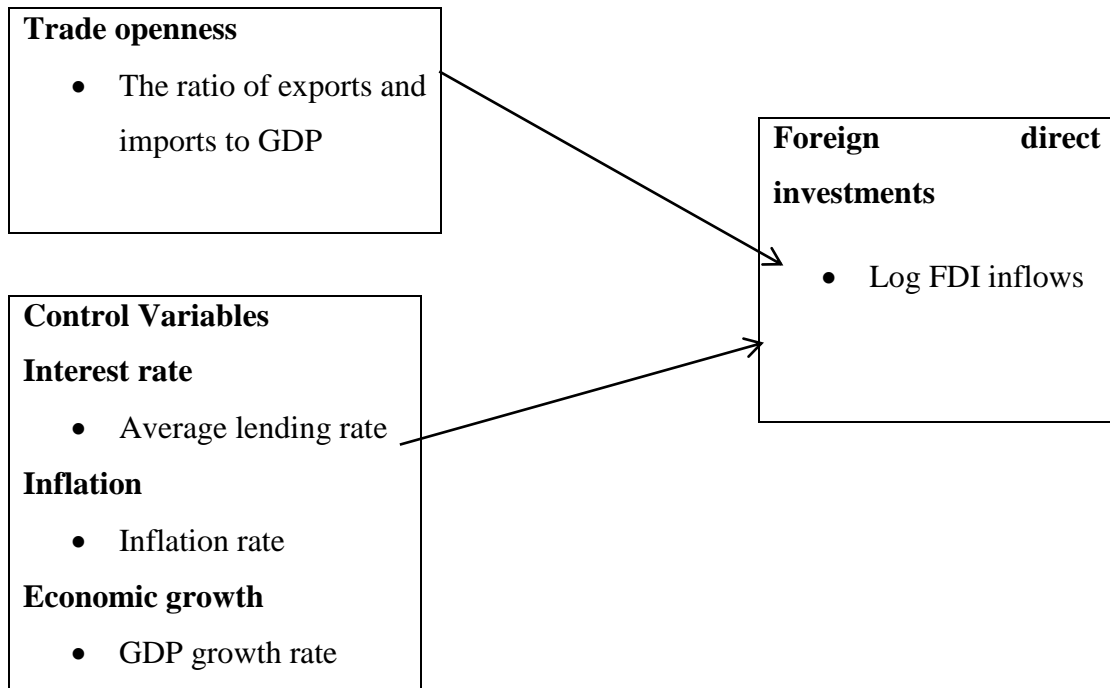
Figure 2.1: The Conceptual Model

Source: Researcher (2022)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter lays out the methods that were utilized to achieve the study's goal, which was to ascertain how trade openness affects foreign direct investments in Kenya. The chapter particularly emphasizes on design, data collecting, and analysis.

3.2 Research Design

The descriptive study design was adopted in this research to estimate the impact of Kenya's macroeconomic factors on growth. Cooper and Schindler, (2008), suggest that the most systematic research design is the descriptive one as it consists of a practical inquiry whereby the researcher does not directly control the independent variable due to their manifestation having already happened or their inherent inability to manipulate. A defining study method was the most suitable as the research sought to creating a profile about the link between Kenya's trade openness and FDI.

3.3 Data Collection

This research only employed use of secondary data. Between January 2002 and December 2021, quarterly secondary data was collected via Central Bank financial statements and KNBS statements and summarized on a data collection form. The 20-year quarterly timeframe was deemed to be long to give sufficient data to meet the study's goals. The secondary data was compiled using a secondary data collection sheet. The precise data obtained encompassed; exports, imports, GDP, interest rate, inflation rate, GDP growth rate as well as FDI inflows.

3.4 Diagnostic Tests

Diagnostic tests were performed out before engaging in equation estimation to make sure that there was no violations on the assumptions made in the traditional linear regression model. This is because, breaking of these assumptions leads to skewed and inefficient parameter estimations.

3.4.1 Stationarity Test

Stationarity means that all attributes (variance, means) of the data collected are constant and o not change with time. Spurious regression is a characteristic of a data that is non-stationary with time (Cooper & Schindler, 2018). This research tested for unit root using the Augmented Dickey Fuller (ADF) test. Robust standard errors were utilized whenever the data in this study could not pass the test.

3.4.2 Cointegration Test

Cointegration prior to the VAR analysis was carried out to check whether the variables possed a long-run or short-run correlation. For this research, Johansen test was used to detect cointegration.

3.4.3 Normality Test

In normality testing, all response variable residuals are frequently thought to have a mean that is normally distributed (Khan, 2018). This was established using Jarque-Bera tests. If the data fails the test, extra information was gathered. On the acquired data, the researcher also used natural logarithms.

3.4.4 Multicollinearity Test

A correlation matrix was adopted to find out the multicollinearity, adopting a threshold of 0.8 (Cooper & Schindler, 2018). Multicollinearity helps eradicate big standard errors that may result from minute standard errors and indeterminate regression coefficients.

The standard errors avoided would otherwise compromise the null hypothesis rejecting it or failing to reject it. Tolerance levels and variance inflation factors (VIF) were utilized. Any multicollinear variables was removed from the research and a new metric chosen and replaced with the colinear variable.

3.4.5 Autocorrelation

Durbin Watson test for serial correlation was employed in this study to determine autocorrelation. Khan (2018) says that failure to consider serial correlation leads to poor parameter estimates and also prejudiced standard errors. This test adopted a no serial correlation null hypothesis. Any data that that seemed to have cross-sectional dependency would be arrested through lagging of the dependent variable.

3.5 Data Analysis

SPSS software version 24 was applied in analyzing data. Tables and graphs presented the conclusions quantitatively. Measures of central tendency and dispersion were calculated using descriptive statistics whereas standard deviation was provided for every variable. Correlation as well as regression were used in inferential statistics. Regression was used to identify the causes and effects of the variables, while correlation was utilized to assess the strength of the link between the research variables. A multivariate regression was used to identify the relationship between the dependent and independent variables in a linearly.

3.5.1 Analytical Model

The formula below was used.:

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

Where: Y = FDI given by natural log of FDI on a quarterly basis

β_0 =y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4$ =are the regression coefficients

X_1 = Trade openness given by the ratio of exports and imports to GDP per quarter

X_2 = Interest rate as measured by the quarterly average lending rate

X_3 = Inflation as measured by the quarterly inflation rate

X_4 = Economic growth as given by quarterly GDP growth rate

ε =error term

3.5.2 Tests of Significance

The relevance of the overall model and each individual variable was determined via parametric testing. ANOVA was used to do the F-test, which established the relevance of the overall model, and a t-test, which establish the coefficients significance.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the findings of this research. The main aim of the study was to determine how trade openness influences FDI inflows in Kenya. The following sections consist of descriptive statistic, diagnostic test, analysis of correlations, regression and discussion of results.

4.2 Descriptive Analysis

The table below includes descriptive statistics for each variable for which analysis was done. Quarterly information was gathered and analyzed using SPSS version 24 software over a twenty-year period (2002 to 2021).

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FDI	80	14.1	16.0	15.188	.5283
Trade openness	80	.2	.3	.294	.0244
Interest rate	80	5.8	18.0	9.819	2.7188
Inflation rate	80	4.0	16.8	7.653	3.2928
Economic growth	80	.05	.12	.100	.0341
Valid N (listwise)	80				

Source: Research Findings (2022)

4.3 Diagnostic Tests

Diagnostic tests were done before even handling the regression model. Co-integration, Multicollinearity, normality, autocorrelation, and stationarity tests were conducted in the survey.

4.3.1 Stationarity Test

The research variables were subjected to a unit-root test to establish if the data was stationary. The unit root test was ADF test. With a standard statistical significance level of 5%, the test was compared to their corresponding p-values. In this test, the null hypothesis states that every variable has a unit root, and the alternative hypothesis is that the variables are stationary. Findings depicted in Table 4.2.

Table 4.2: Stationarity Test

ADF test Variable	Statistic	p value	Comment
FDI	6.2126	0.0000	Stationary
Trade openness	8.2031	0.0000	Stationary
Interest rate	7.8718	0.0000	Stationary
Inflation rate	6.8447	0.0000	Stationary
Economic growth	6.8132	0.0000	Stationary

Source: Research Findings (2022)

As demonstrated in Table 4.2, this test concludes that the data is stationary at a 5% level of statistical significance since the p-values all fall below 0.05.

4.3.2 Co-integration Test

This test was done to establish if the explanatory variables show a long run or short run interrelationship. The outcomes are displayed in Table 4.3.

Table 4.3: Co-integration Test Results

	Eigen Value	Trace Statistic	Critical value at 95%	P-value
Trade openness	0.123	23.13	26.03	0.000
Interest rate	0.083	61.02	62.07	0.000
Inflation rate	0.301	20.01	26.79	0.000
Economic growth	0.189	27.22	28.76	0.000

Source: Research Findings (2022)

The findings indicate all variables to be having a p value of below 0.05 therefore establishing that variables show a long-run or short run link.

4.3.3 Normality Test

To establish if the data was normally distributed, the researcher used the Jarque-Bera tests. If the p-value exceeds 0.05, concluding that there is normal distribution of data and vice versa. The test's outcomes are described in Table 4.4.

Table 4.4: Normality Test Results

	Jarque-Bera Coefficient	P-value
FDI	2.589	0.100
Trade openness	5.304	0.202
Interest rate	1.763	0.315
Inflation rate	2.153	0.227
Economic growth	3.145	0.201

Source: Research Findings (2022)

Since the data displayed a p value of above 0.05 therefore having a uniform distribution, the researcher adopted the alternative hypothesis. This data was fit to be subjected to tests and analysis like for variance, Pearson's Correlation and regression.

4.3.4 Multicollinearity

In a multiple regression model, multicollinearity is displayed whenever predictor variables exhibit a substantial relationship. An event where independent variables have great correlations is unfortunate. Parameters are said to have multicollinearity if they have a perfect linear connection. Outcomes for the test on multicollinearity were displayed in Table 4.5.

Table 4.5: Collinearity Statistics

| | Collinearity Statistics | |
	Tolerance	VIF
Trade openness	0.298	3.356
Interest rate	0.318	3.145
Inflation rate	0.421	2.375
Economic growth	0.511	1.957

Source: Research Findings (2022)

VIF value is utilized whenever values that fall below 10 are not multi-linear. One condition for multiple regressions to occur is that no strong connection should be evidenced among variables. Given by the outcomes, every VIF variable is below 10 as indicated in table 4.5 which shows that independent variables in the study experience no significant statistical multi-linearity.

4.3.5 Autocorrelation

A serial correlation test established the relationship of error terms for diverse times. For the research to obtain the desired model parameters, the Durbin Watson serial correlation test was used to carry out the analysis of autocorrelation in the data, which is a major shortcoming in the data analysis that must be examined. The findings are depicted in Table 4.6.

Table 4.6: Autocorrelation Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.520[a]	.271	.232	.0176555	2.417

a. Predictors: (Constant), Economic growth, Interest rate, Trade Openness, Inflation rate
b. Dependent Variable: FDI

Source: Research Findings (2022)

From the null hypothesis, no first-order serial/auto correlation exists. The 2.417 Durbin Watson statistical varies from 1.5 to 2.5 indicating no serial correlation.

4.4 Correlation Analysis

Pearson correlation was employed to establish the relationship linking FDI inflows in Kenya to the characteristics of the study (trade openness, inflation, interest rate and economic growth). Table 4.7 depicts the outcomes.

Table 4.7: Correlation Analysis

		FDI	Trade Openness	Interest rate	Inflation rate	Economic growth
FDI	Pearson Correlation	1				
	Sig. (2-tailed)					
Trade Openness	Pearson Correlation	.444**	1			
	Sig. (2-tailed)	.000				
Interest rate	Pearson Correlation	.090	.134	1		
	Sig. (2-tailed)	.427	.237			
Inflation rate	Pearson Correlation	.002	.134	-.221*	1	
	Sig. (2-tailed)	.983	.238	.049		
Economic growth	Pearson Correlation	.329**	.210	.036	-.136	1
	Sig. (2-tailed)	.003	.061	.748	.230	

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=80

Source: Research Findings (2022)

From the study's findings, a moderate positive that is statistically significant link exists between trade openness and FDI inflows (r = .444, p = .000). The correlation results further bare a weak positive as well as significant statistical connection between economic growth and FDI inflows (r = .329, p = .003). Inflation displayed a weak positive and not significant link with FDI inflows in Kenya (r = .002, p = .983). The

rate of interest displays a not significant positive interrelationship to FDI inflows in the Kenyan economy (r = .090, p = .427).

4.5 Regression Analysis

Trade openness, interest rate, inflation, together with the rate of growth were utilized as agents to predict FDI inflows in Kenya. The test was done at 5% level of significance. Table 4.8 to 4.10 displays the results.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.520[a]	.271	.232	.0176555	2.417

a. Predictors: (Constant), Economic growth, Interest rate, Trade Openness, Inflation rate
b. Dependent Variable: FDI

Source: Research Findings (2022)

The R squared indicator indicates how the explanatory variables may describe variations in the response variable. As indicated in Table 4.8, the 0.271 R square, indicating that changes in trade openness, interest rate, inflation, and the economic growth account for 27.1 percent of the FDI inflows in Kenya. 72.9 percent of the FDI inflows variation to Kenya is explained by other variables that were not examined in this research. The correlation coefficient (R) of 0.520 showed a significant link amongst predictor factors and FDI inflows.

The value of P obtained by ANOVA is 0.000, which is below p=0.05. This demonstrates that the model's importance described how trade openness, rate of interest, inflation, and economic growth affect Kenya's FDI inflows.

Table 4.9: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.009	4	.002	6.965	.000[b]
	Residual	.023	75	.000		
	Total	.032	79			

a. Dependent Variable: FDI
b. Predictors: (Constant), Economic growth, Interest rate, Trade Openness, Inflation rate

Source: Research Findings (2022)

The relevance of various variables was determined using the model coefficients. The statistics of t and values of p were used to accomplish this. This study is significant since it allowed the researcher to determine which independent variables were chosen (Trade openness, interest rate, inflation and economic growth) significantly influences the FDI inflows of the Kenyan economy. Table 4.10 summarize the findings.

Table 4.10: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.318	.060		3.304	.000
	Trade Openness	.336	.086	.406	3.912	.000
	Interest rate	.005	.004	.001	.041	.967
	Inflation rate	.007	.001	.009	.083	.934
	Economic growth	.278	.001	.277	2.696	.009

a. Dependent Variable: FDI

Source: Research Findings (2022)

Table 4.10 displays that only trade openness and economic growth, with a p value less than 0.05, were a significant predictor of FDI inflows in Kenya. Other independent factors (interest rates, and inflation) were not significant predictors of FDI inflows in Kenya, as evidenced by low t values and p values greater than 0.05.

The following regression was estimated:

$$Y = 0.318 + 0.336X_1 + 0.278X_2$$

Where,

Y = FDI inflows

X_1 = Trade openness

X_2 = Economic growth

Using the constant = 0.318, we can see that if selected independent variables (trade openness, interest rates inflation, and economic growth) were rated zero, the FDI inflows would increase by 0.318. Increasing trade openness by one unit would increase FDI inflows by 0.336 units while increasing the economic growth by one unit yields the FDI inflows to rise by 0.278. The other variables considered had no statistically significant influence.

4.6 Discussion of Research Findings

This research had an aim of seeing the way in which the predictor variables impacted the FDI inflows in the Kenyan context. Independent variables included trade openness, interest rate, inflation together with economic growth. This research tried to show FDI inflows being a dependent variable. The natural logarithm of quarterly FDI inflows measured FDI inflows. Correlation as well as regression analysis were utilized to show the connection linking the independent to dependent variables.

The Pearson model showed that a moderate positive and statistically significant relationship exists between trade openness and FDI inflows. The correlation results further bore a weak positive and significant statistical connection between economic

growth and FDI inflows. Inflation unveiled a weak positive and not significant link with FDI inflows in Kenya. The rate of interest displays a not significant positive interrelationship to FDI inflows in the Kenyan economy.

The independent variables accounted for 27.1% of variances in FDI inflows, in accordance with the summary of the model. The predictor variables of this research had explanatory power that fitted a 95% confidence level like indicated by the 0.000 p value, that was way below the threshold of significance that is 5%. Therefore, the overall model employed in this study is a good and sufficient prediction model to determine the FDI inflows in Kenya.

This research is in agreement with Lien (2021) who investigates how trade permeability affects FDI inflows into Vietnam. The study examined the effect of trade openness on FDI in Vietnam from 2005 to 2019 using the vector autoregression model. The research data span the quarters 2005: Q4 through 2019:Q3, and are time-series data with quarterly frequency. The International Financial Statistics aided in gathering the FDI data. Based on data on Vietnam's export, import, and GDP gathered by the General Statistics Office of Vietnam, the data on trade openness were derived. The estimated outcome demonstrates that trade openness influences FDI positively.

This research is also in agreement with a research steered by Mohammed and Hayewa (2020) who sought to look into trade openness impact on FDI in Sub-Sahara African nations for the 2000 to 2017 duration. The fully modified least squares approach, panel unit root test, and panel co integration test were all used in the study's panel data analysis. The outcomes show that all of the variables had long-term relationships and were cointegration of order one. More specifically, the findings indicate that whereas

corruption was negatively and statistically significant in impacting FDI in the region, trade openness was positively and statistically significant in influencing FDI.

The study findings are also in line with Makoni (2018) who chose nine African nations between the years of 2009 and 2016 to studied the impact of trade openness on FDI in those nations. The ratio of net foreign direct investment to GDP, real exchange rate, trade openness, infrastructure, macroeconomic stability (measured as a proxy for real economic growth), endowment of natural resources, and capital openness were all considered to be independent variables. The dependent variable was the ratio of net FDI inflows to GDP. The research used a variety of econometric methods, including generalized least squares, fixed effects models, random effects, and pooled OLS. The random effects model results disclosed FDI and trade openness were positively correlated, while capital openness was positively correlated but not significantly so.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The major motive of this research was to investigate the way trade openness influences the FDI inflows in Kenya. The findings from the above sections are outlined in this chapter together with the conclusions and limitations of this study. This section also outlines the strategies that can be adopted by policymakers. It also carries the recommendations.

5.2 Summary of Findings

The research assessed how trade openness influenced the FDI inflows in Kenya. Trade openness, interest rates, inflation, as well as economic growth were adopted to be the predictor variables of the research. The study used descriptive design to do analysis as well as data collection. Secondary data was gotten from CBK as well as KNBS and prepared using SPSS version 24 program. The study utilized 20 years compiled quarterly data.

The Pearson model showed a moderate positive and statistically significant relationship exists between trade openness and FDI inflows. The correlation results further revealed a weak positive as well as significant statistical link between economic growth and FDI inflows. Inflation unveiled a weak positive and not significant association with FDI inflows in Kenya. The rate of interest displays a not significant positive interrelationship to FDI inflows in the Kenyan economy.

The independent variables accounted for 27.1% of variances in FDI inflows, in accordance with the summary of the model. The predictor variables of this research had

explanatory power that fitted a 95% confidence level like indicated by the 0.000 p value, that was way below the threshold of significance that is 5%. Therefore, the overall model employed in this study is a good and sufficient prediction model to determine the FDI inflows in Kenya.

The regression results further discovered that if selected independent variables (trade openness, interest rates inflation, and economic growth) were rated zero, the FDI inflows would increase by 0.318. Increasing trade openness by one unit would increase FDI inflows by 0.336 units while increasing the economic growth by one unit might yield a 0.278 FDI inflows rise. The other variables considered had no statistically significant influence.

5.3 Conclusion

The study's findings show that trade openness and economic expansion have a positive impact on Kenya's FDI inflows. The research finds that the higher trade openness and economic growth leads to a significant increase in FDI inflows in Kenya. The research also finds that while interest rate and inflation have a positive impact on FDI inflows, the impact is not statistically meaningful.

The study concludes that the factors under research – trade openness, interest rate, inflation and the economic growth – affect FDI inflows by describing 27.1% of the variations. This means that the non-model variables are only responsible for 72.9% of variations of FDI inflows in the country. It is therefore substantial to infer that the outlined factors affect the FDI inflows as shown in the p-value below 0.5 ANOVA summary.

The conclusions of this research concurred with Musabeh and Zouaoui's (2020) study which looked at the factors that affected FDI inflows and the effects of the FDI policies implemented by the North African host nations of Egypt, Morocco, Algeria, Libya, and Tunisia between 1996 and 2013. The independent factors have been divided into three categories: economic, institutional, and political, with two different types of investment programs. In the model, the following independent variables were included: market size, investment freedom, investment agreement, trade openness, gross fixed capital creation, natural resources, infrastructure, exchange rate stability, inflation, corruption perception index, regulation, and political limitations index. The findings showed that the rise of FDI inflows was positively and statistically significantly correlated with trade openness.

5.4 Recommendations

Outcomes show that trade openness possesses a positive and considerable effect on FDI inflows in Kenya implying a rise in trade openness can have a positive effect on FDI inflows. This also means that foreigners are likely to invest with a country that has a high degree of openness compared to a more closed economy. The research proposes that policy makers to adopt measures aimed at enhancing trade openness, since this might yield a rise in FDI inflows and possibly also other areas of the economy.

This research has demonstrated that the rate of growth has a positive and significant effect on the FDI inflows in the country. It therefore recommends that several approaches are required to make sure that the factors that lead to economic growth are well addressed to enhance further FDI inflows. Policy makers should come with long term policies aimed at ensuring sustainable economic growth.

5.5 Limitations of the Study

This research embraced a 20 years period (2002-2021). It gives no substantial evidence that in an added timeframe, the findings will not change. Moreover, it is unclear that these conclusions will be sustained after 2021, things might change. Extra timeframe is reliable because it comprises instances with economic shifts like recessions and booms.

The main drawback of the study was the quality of data. It is not possible to reliably state the results obtained in the survey as the correct reflection of the general situation. Accuracy and reliability of the data collected are assumed to a certain point. Additionally, because of the existing circumstances, computing the data has been incoherent. This study uses secondary data as opposed to primary data. The determinants of growth have been partially considered because of unavailability of data for all determinants.

Regression models were used to conduct data analysis. It might be impossible for the researchers to generalize outcomes because of the setbacks accruing from model utilization like erroneous and deceptive conclusions emanating from altering variable value. Whenever data is put in a regression model, it is impossible to process it through another previous model.

5.6 Suggestions for Further Research

The aim of the research was to determine the impact of trade openness on FDI inflows of the Kenyan economy. A research utilizing primary data or mixes primary data with secondary data is recommended so as to recognize qualitative elements that might have been overlooked in the current research.

This research failed to consider all independent variables that affect FDI inflows of an economy. A suggestion therefore arises to include other factors in future studies in order

to come up with more specific findings. These factors include money supply, balance of payments, corruption, financial development, and FDI. Providing details how each of them affects FDI inflows will enable policymakers make decision on the steps to take in order to control their FDI inflows.

Because of unavailability of data, this study focused on the latest 10 years. Other future studies should employ a wider range to come up with a valid conclusion. This study was also under restriction because it only focused solely on Kenya. Additional survey should be conducted in other nations to determine results. In conclusion, the investigator adopted a regression model to do a confirmation or rejection of the findings. Any studies in future should adopt other independent methods to confirm or reject their findings.

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APPENDICES

Appendix I: Research Data

Year	Quarter	FDI	Trade Openness	Interest rate	Inflation rate	Economic growth
2002	1	14.5825	0.2183	5.8333	7.8500	0.0550
	2	14.6232	0.2264	6.0833	5.8667	0.0530
	3	14.6780	0.2157	6.5000	4.7067	0.0520
	4	14.6930	0.2314	15.1667	4.0333	0.0550
2003	1	14.7740	0.2617	18.0000	4.1567	0.1121
	2	14.8404	0.2859	18.0000	6.0133	0.1071
	3	14.8875	0.2827	15.3333	9.0200	0.1191
	4	14.9339	0.2883	11.6667	12.7767	0.1228
2004	1	14.9933	0.3120	9.5000	15.8267	0.1114
	2	15.0610	0.3177	8.8333	16.2900	0.1136
	3	15.1083	0.2911	8.5000	14.2967	0.1188
	4	15.1415	0.3029	8.5000	10.6967	0.1224
2005	1	15.1923	0.2099	8.5000	7.2567	0.1063
	2	15.2653	0.3146	8.5000	5.0433	0.1072
	3	15.3090	0.3229	8.5000	4.5633	0.1126
	4	15.3341	0.3315	8.5000	5.3867	0.1174
2006	1	15.3848	0.3185	8.5000	6.2033	0.1097
	2	15.4274	0.3262	9.0000	6.8267	0.1072
	3	15.4490	0.3379	11.5000	7.2367	0.1114
	4	15.4728	0.3421	11.5000	6.9767	0.1140
2007	1	15.4992	0.3214	11.5000	6.6667	0.1094

Year	Quarter	FDI	Trade Openness	Interest rate	Inflation rate	Economic growth
	2	15.5501	0.3271	10.8333	6.6567	0.1083
	3	15.6059	0.3359	10.5000	6.3900	0.1071
	4	15.6131	0.3427	10.5000	6.4367	0.1053
2008	1	15.6514	0.3298	10.0000	6.8400	0.1065
	2	15.6850	0.3149	10.0000	6.5900	0.1057
	3	15.7186	0.3192	10.0000	6.4700	0.1056
	4	15.7521	0.3046	10.0000	6.4033	0.1037
2009	1	15.7857	0.3111	9.5000	6.4833	0.1028
	2	15.8193	0.3029	9.0000	7.7233	0.1045
	3	15.8529	0.3072	9.0000	8.3233	0.1044
	4	15.8864	0.3262	9.0000	8.1533	0.0987
2010	1	14.1327	0.2813	9.0000	7.3600	0.0993
	2	14.1750	0.2790	9.0000	5.6833	0.1001
	3	14.2507	0.2795	9.0000	4.7033	0.1001
	4	14.2479	0.2730	8.8300	4.6033	0.0938
2011	1	14.2431	0.2765	9.0000	7.3600	0.0968
	2	14.2939	0.2756	9.0000	5.6833	0.0985
	3	14.3339	0.2745	9.0000	4.7033	0.0984
	4	14.3880	0.2753	8.8300	4.6033	0.0919
2012	1	14.3989	0.3131	6.9167	16.8333	0.0550
	2	14.4545	0.3140	6.7500	15.9200	0.0530
	3	14.5112	0.3149	6.0000	13.3933	0.0520
	4	14.5505	0.3158	6.0000	10.3000	0.0550

Year	Quarter	FDI	Trade Openness	Interest rate	Inflation rate	Economic growth
2013	1	14.5825	0.3167	5.8333	7.8500	0.1114
	2	14.6232	0.3176	6.0833	5.8667	0.1136
	3	14.6780	0.3185	6.5000	4.7067	0.1188
	4	14.6930	0.3194	15.1667	4.0333	0.1224
2014	1	14.7740	0.3203	18.0000	4.1567	0.1063
	2	14.8404	0.3212	18.0000	6.0133	0.1072
	3	14.8875	0.3220	15.3333	9.0200	0.1126
	4	14.9339	0.3229	11.6667	12.7767	0.1174
2015	1	14.9933	0.3238	9.5000	15.8267	0.1097
	2	15.0610	0.3247	8.8333	16.2900	0.1072
	3	15.1083	0.3256	8.5000	14.2967	0.1114
	4	15.1415	0.3265	8.5000	10.6967	0.1140
2016	1	15.1923	0.3274	8.5000	7.2567	0.1094
	2	15.2653	0.3283	8.5000	5.0433	0.1083
	3	15.3090	0.3292	8.5000	4.5633	0.1071
	4	15.3341	0.3301	8.5000	5.3867	0.1053
2017	1	15.3848	0.3310	8.5000	6.2033	0.1065
	2	15.4274	0.3318	9.0000	6.8267	0.1057
	3	15.4490	0.3327	11.5000	7.2367	0.1056
	4	15.4728	0.3336	11.5000	6.9767	0.1037
2018	1	15.4992	0.3345	11.5000	6.6667	0.1028
	2	15.5501	0.3354	10.8333	6.6567	0.1045
	3	15.6059	0.3363	10.5000	6.3900	0.1044

Year	Quarter	FDI	Trade Openness	Interest rate	Inflation rate	Economic growth
	4	15.6131	0.3372	10.5000	6.4367	0.0987
2019	1	15.6514	0.3381	10.0000	6.8400	0.0993
	2	15.6850	0.3390	10.0000	6.5900	0.1001
	3	15.7186	0.3399	10.0000	6.4700	0.1001
	4	15.7521	0.3408	10.0000	6.4033	0.0938
2020	1	15.7857	0.3416	9.5000	6.4833	0.0968
	2	15.8193	0.3425	9.0000	7.7233	0.0985
	3	15.8529	0.3434	9.0000	8.3233	0.0984
	4	15.8864	0.3443	9.0000	8.1533	0.0919
2021	1	15.8210	0.3452	9.0000	7.3600	0.0550
	2	15.9270	0.3461	9.0000	5.6833	0.0530
	3	15.9360	0.3470	9.0000	4.7033	0.0520
	4	15.9840	0.3479	8.8300	4.6033	0.0550