**MEKELLE UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF ECONOMICS**

# TITLE: DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN ETHIOPIA

**A RESEARCH STUDY SUBMITTED TO DEPARTMENT OF ECONOMICS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE (MSc) IN FINANCIAL ECONOMICS**

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**MEKELLE, TIGRAY, ETHIOPIA**

**DECLARATION**

This is to certify that the thesis prepared by Mulata ngusie entitled "Determinants of Foreign Direct Investment in Ethiopia", submitted for the award of the degree of MSc in Financial Economics at Mekelle University is my own deed. I assure that the thesis has been committed independently, and it has not been proffered by any one for the award of any other degree, diploma, or similar qualification at any other university or institution. The paper consolidates my own findings, interpretations, analysis and all sources of information and ideas from other authors have been properly acknowledged. I also declare that any assistance received during the course of this research has been duly credited.

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**ACRONYMS**

| | |
|---|---|
| ARDL | Auto regressive Distributed Lag Model |
| BIT | Bilateral Investment Treaty |
| COMES | Common Market for Eastern and Southern Africa |
| ECM | Error Correction Model |
| FDI | Foreign Direct Investment |
| GDP | Gross Domestic Product |
| ICSID | International Centre for Settlement of Investment Disputes |
| IMF | International Monetary Fund |
| LDNs | Least Developed Nations |
| MNC | Multi-National Corporations |
| MNCs | Multinational Companies |
| MNE | Multinational Enterprises |
| NBE | National Bank of Ethiopia |
| OECD | Organisation for Economic Cooperation and Development |
| SSA | Sub Saharan Africa |
| UNCTAD | United Nations Conference on Trade and Development |
| WB | World Bank |
| WTO | World Trade Organization |

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***ABSTRACT***

*Foreign Direct Investment (FDI) plays a vital role in accelerating economic growth and development in developing countries like Ethiopia by supplementing domestic capital, creating employment, and enhancing technology transfer. The main objective of this study is to investigate the determinants of foreign direct investment in Ethiopia during the period 1990-2022. The analysis employed both descriptive and econometric techniques to identify the key macroeconomic and institutional factors influencing FDI. This study examines the determinants of foreign direct investment (FDI) inflows in Ethiopia using recent data and extended variables such as government expenditure and political instability. The ARDL model used in this study is specifically tailored to capture the dynamic relationship between FDI and its determinants, allowing for the analysis of both short-run and long-run interactions despite policy reforms, FDI inflows remain low compared to the country's potential. The findings aim to provide insights for policymakers to design strategies that effectively attract and sustain foreign investment.Variables such as gross domestic product per capita (GDPk), inflation rate, exchange rate, trade openness, government expenditures (EXPN), and political stability were included in the model. The regression results reveal that GDPk, trade openness, and EXPN have a positive and significant effect on FDI inflows, while inflation, exchange rate volatility, and political instability have a negative and significant impact. The findings imply that maintaining macroeconomic stability, improving infrastructure, and ensuring political and institutional stability are crucial for attracting and sustaining foreign investment in Ethiopia. The study recommends that policymakers focus on creating a stable investment environment and strengthening economic reforms to enhance the country's competitiveness in the global investment market.*

## Table of Contents Pages

# CHAPTER ONE

# INTRODUCTION

## 1.1. Background of the Study

Foreign direct investment (FDI) refers as the inflow of capital formations a means of country borders that can facilitate the capital mobility and accumulation, economic growth and economic development of one's given hosting nation. It ensures and maintains to establish the development of most economies. Foreign direct investment shall aggrandize and determine the economic growth of recipient nation and the country making investment. FDI may bring significant benefits by creating high-quality jobs, introducing modern production and management practices. It highlights how multinational corporations and government contribute to better working conditions in host countries (Neha and Monica, 2018).

Over the past decade the world economy has served and enlarged its integration even in the face of the global financial crisis. A major part of this globalization has been generated by capital inflows. Hence FDI has become one of the most important economic flows in the global economy. It is a critical source of capital for developing countries and remains a significant source of investment in the developed world. Governments in developing countries made unilateral policy changes that opened up markets across the globe and increased competition among countries for FDI (Helen, 2013).

According to the World Bank data (2014), the total amount of foreign direct investment inflows of world amounted to $ 1.45 trillion in 2013. All country leaders have understood that gaining a share of this FDI is one of the best ways to enhance economic growth of one's own government. However, Currently, The world economy of developed and least developed nations is facing some various trends of foreign direct investment. The amount of total foreign direct investment (FDI) inflows has reduced once again to $1.3 trillion in 2022. This shows that there was about one fifth of declining compared to its last five years (2017) due to the occurrence of pandemic in 2020. This results in a slump down of the global average economy growth rate to merely 1 % (Global Investment Report, 2023)

Less developed nations have utilized foreign direct investment as method of financing the construction of new infrastructure and providing job opportunities for their workers. FDI can be a source of capital inflows, primarily to less developed nations, develops manufacturing and trade sectors, expand in advanced and sophisticated technologies, arise local production and exports, provide job opportunities and increase local skills, and bring about

improvements in infrastructures. As results, FDI become the basic component and contributor variable to bring sustainable economic growth in a country (Prince and Vijay, 2019).

FDI can help a developing country acquire an industrial base and achieve export competitiveness much faster than the "infant industry" policies with which many countries have experimented (e.g., import substitution, forced joint ventures, etc.). China offers striking evidence of such an "FDI-led industrial take-off" (Ozawa, 2011).

Investment plays a vital role on development economic growth. Investment also in turn determined among others by saving. The less developed nations are characterized in the habit of low savings so as to exist lower investment formations resulting low economic growth. Under such condition the role of FDI is indispensable. This made for several developing nations to put and generate considerable efforts to attract foreign direct investment. Although the economy was fluctuated time to time, s FDI inflows to Ethiopia increasing. Based on this, the government of Ethiopia has practiced several economic sectors to foreign investors. It has also highlighted exercised a range of policy reforms and issued several incentives (Dessalegn et al, 2020).

After 1991 the Ethiopia economy shifted from command economy to free market economy, consequently, the government promoted different economic reforms, like introducing foreign investment, mainly concerning with the manufactures sector, central owned businesses and enterprises were brought to privatization owned. Ethiopia has also tried to introduce several policies and strategies to attract foreign direct investment (FDI). Nowadays, Ethiopia has agreed to sign 35 bilateral investment treaties (BITs), becomes a member of the Multilateral Investment Guarantee Agency (MLIGA), and the Common Market for Eastern and Southern Africa (COMESA). Although Ethiopia has not ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States, it has agreed to use the Additional Facility of the International Centre for Settlement of Investment Disputes (ICSID) (Hagos, 2022).

The economic growth was not well enhancing though the policy had been highlighted in 1990s. However, Ethiopia has exercised worthwhile economic growth during 2000s. According to the official data, Ethiopia has registered the 9% average economic growth in years of 2000-2019. Hence it showed a good level of economic indicators like, poverty reduction, increase in life expectancy and other human development indicators. However, over the last two decades, the economic growth was generated through solidity public investment in infrastructure, the manufacturing sector, energy, transport, and

communications. Simultaneously the rapid domestic and foreign debt, shortages of foreign exchange, and double-digit inflation were occurred (IMF, 2020).

According to UNCTAD (2018), Ethiopia depicted a dramatic incensement on the flows of foreign direct investment in the past five years. Ethiopian FDI has risen from $278 million to $3.5 billion in 2012 to 2017 respectively that was around 13 times in the five years interval. This made Ethiopia to be ranked as the second largest host of FDI next to Egypt in the Africa. Two years ago (2021) Ethiopia rose up the FDI to $4.2 billion means that from $2.4 billion in 2020.it showed 7.56% of advancement within one year earlier (World investment report, 2022).

### 1.2. Statement of the Problem

Countries try to promote foreign direct investment because it is considered as main source of growth and development. The least developed nations (LDNs) have been conspicuously trying to promote and attract foreign investors as means of different kinds of policy mechanisms and various economic reforms. Though these developing nations (mainly in Africa) provide various policy reforms, they have faced low and unstable FDI inflows. The inflow of foreign direct investment (FDI) to Africa has been very low compared to other parts of the world despite its enormous resources base and potential (United Nations World Investment Report, 2011-2013).

There may be many reasons as to why those most developing countries have low capabilities in attracting foreign investors. Some common attributes and major challenges that impede the development of FDI for these countries are political and economic problems. Political instabilities mainly concern with policy reforms such as poor governance, lack of knowledge, international guidance, inhospitable regulatory environments and less understanding of investment promotion strategies. Moreover macroeconomic instabilities including weak providing infrastructures, low economic growth and low level of national saving are the other factors that affect the FDI inflows for these regions.

This paper mainly focuses on the determinants of the Ethiopian foreign direct investment. In fact, Ethiopia has more inseparable and alike characteristics with these developing countries on its exercising and attracting foreign investments. Like other nations, Ethiopia could be able to incentivize foreign investors to increase economic growth and development through fostering and hosting foreign direct investment.

Numerous investigations have paid attention on the issues, factors and trends of foreign direct investment in Ethiopia. Both the economists and politicians alike are the leading men

on the decision making and policy analysis of foreign direct investment (FDI). Starting from the question that “the reason why Ethiopia is less successful than some countries in attracting FDI compared to its potential resources", many researchers tried to identify and understand the determinant factors of FDI inflows.

A study was conducted by Deresse (2020) with the empirical relation between foreign direct investment inflow and its determinants in Ethiopia by applied Autoregressive distributed lag model on the data collected from 1981-2018. The finding of the study showed that all the determinants of FDI (degree of trade openness, market size, rate of inflation, human capital and exchange rate were stationary at level and first difference. The researcher detected that there were the existences of long run and short run link among FDI and independent variables. Based on his result that trade openness, human capital, exchange rate are statistically significant and have positive impact on FDI inflow in the long run. However, the remained two are significant and negatively related to FDI inflow. Besides, in the short run version human capital and exchange rate are more significant and positively correlated with FDI attraction whereas trade openness, market size and inflation rate are statistically significant and negative effect on FDI.

Similarly, the studies which were conducted by some researchers such as Rozina (2004) , Getinet and Hirut (2006), and Fvene (2020) focused on the macroeconomic determinants of FDI include; market size, trade openness, exchange rate, inflation rate and exchange rates in different period of time. Despite they did use almost the same variables which are mentioned above, the finding and outcomes of their study vary among one another. So there is no common consensus by researchers on the determinants of FDI so far. So the researcher is motivated to settle this intellectual dispute by introducing new potential variables which are not observed by the former researchers such as government expenditure and political instability. Moreover, as per studies be conducted in the area of determinants of FDI, the potential factors desirably encourage foreign direct investment inflow can be varied from time to time. Therefore the researcher comes up to fill the gap on time scope and the extent lacks to engage the recent data and tremendous growth and prevalence of foreign direct investment. So the researcher is going to extend the existing study on determinants of the FDI by using the recent data trends and incorporating these farther additional independent variables.

## 1.3. Objectives of the Study

### 1.3.1. General objective

The general objective of the study is to identify and understand the overall determinants of Foreign Direct Investment inflows (FDI) in Ethiopia.

### 1.3.2. Specific Objectives

- ❖ To identify the effect of inflation rate on foreign direct investment.
- ❖ To assess the performance of FDI and recommend a policy suggestion to accelerate the inflow of FDI.

## 1.4. Research Questions

- What are the factors that determine foreign direct investment?
- What is the effect of inflation rate on foreign direct investment?
- What should be done to accelerate the inflow of FDI?

## 1.5. The Significance the Study

This study paper can play several roles for various stakeholders. The study can help the foreign investor already in business for identifying, understanding and making investment decision as much as possible. It also depicts that the country would put effort to attract more FDI for its regional states. Once the study is completed, it could serve as source of information for designing and implementing sovereign national Policies. Moreover, the study may be considered as a marginal input for the investment authorities (Ethiopia Investment Authority) to review and setup on the base of economic and political policies and strategies. For instance, the authorities will be simply in a position to identify the most important factors that determine FDI and should encourage attracting more Foreign Direct Investments. In general, the study may be set up to highlight and give clue for further studies (allowing the opening of new areas of study) on the issues related to the determinants of Foreign Direct investment in developing nations beyond to Ethiopia.

## 1.6. Scope and Delimitation of the Study

The study is geographically delimited in Ethiopia. And the researcher will use a time serious data of 1992-2022G.C. The researcher prefers this range based on data availability and because it is supported by the fact that Ethiopia have been practiced a sustainable economic developments and good performance of foreign investments. In addition to, various macroeconomics reforms and programmes have been implemented to incentive Foreign Direct Investment during these periods.

### 1.7. Organization of the Study

The study was organized in five chapters. Chapter one describes the introduction and overview the background of the study. Chapter two will also highlight both the theoretical and empirical literatures. Chapter three will illustrate the methodology of the study. Chapter four display the outcomes and analysis of the results and discussions of the result. Chapter five shall contain summary of findings, conclusions and policy recommendations.

# CHAPTER TWO

# LITERATURE REVIEW

This section mainly focuses on the literature review of Foreign Direct investment in detail. The chapter consists and presents two main parts, theoretical and Empirical Literature reviews that mention on the advocating and understanding of the determinants of Foreign Direct Investments in Ethiopia.

## 2.1. **Theoretical Literature Review**

According UNCTAD (2004), one third of total international trade presents between the intra-firms. A number of attempts have been made to integrate FDI theory with the theory of international trade. The trend of FDI in the past two decades and the rapid growth in output of multinational firms made the international trade to be changed and to have a large extent.

Foreign direct investment (FDI), foreign portfolio investment (FPI), and other financial investment flows such as international banking and loans are incorporated under private capital flows. Hence international capital flows lead to accelerate the financial globalisation than trade globalisation. Therefore, it has become more imperative to understand the underlying theories which help to explain this growth and movement in capital flows, mainly from the investor's perspective (UNCTAD, 2012).

This part focuses on FDI since it is considered as sources capital flow, mainly amongst less developed nations. As a result the lesson presents a theoretical perspective of FDI. The first part highlights an overview of FDI definitions. The second part discusses the microeconomic and the macroeconomic FDI theories.

### 2.1.1. **Definitions of Foreign Direct Investment**

FDI can be defined as the source of income in a nation's financial recording. It is also considered as a basic element of macroeconomic variable that determines the balance of payments of one's country (UNCTAD, 2021). It refers the international investment made by one economy's resident entity, in the business operations of an entity resident in a different economy, with the intention of providing a lasting interest (International Monetary Fund (IMF, 1993).

Foreign direct investment (FDI) occurs when an investor based in one country (the home country) acquires an asset in another country (the host country) with the intent to manage that asset. The management dimension is what distinguishes FDI from portfolio investment in foreign stocks, bonds and other financial instrument (World Trade Organisation, 1996).

Alternatively, FDI can be considered as the ownership of 10 present or more of the ordinary shares or voting stock of an enterprise which is usually considered to indicate 'significant influence' by an investor (IMF, 2000). This however differs from country to country and can even be determined by their policies, some of which restrict the levels of shareholdings of foreigners in local firms.

According to the World Bank (2004), Foreign Direct Investment is that foreign investment that establishes a lasting interest in or effective (active) management control over an enterprise. In its publication on The Benchmark Definition of FDI, the OECD (2008), defined FDI as the net inflows of investment undertaken to acquire a lasting management interest (10% or more of the voting stock) in a firm conducting business in any other economy but the investor's home country. Emphasis is also placed on the fact that the 10% threshold commonly referred to is recommended to ensure statistical consistency across countries.

For investment to qualify as FDI, emphasis is placed on the fact that the investor must meet the 10% voting share threshold commonly referred to, which as the recommended mainly to ensure statistical consistency across countries (UNCTAD, 2009). Lipsey et al (1999) had earlier commented that this "lasting interest" implies the existence of a long-term relationship between the direct investor and the firm, as well as a significant degree of influence on the management of the firm. However, Mundell's model considered more short term, international portfolio type of investments rather than FDI, and therefore could not explain international production through FDI. Many of the earlier theories were based mainly on the U.S and Europe (Denisia, 2010). .

### 2.1.2. The Microeconomic and Macroeconomic Theories of Foreign Direct Investment

In the Second World War later on, foreign direct investment (FDI) had been taken to have an important role in the world economy and international trade. Theoretical studies of FDI have made to bring more understanding of the economic policies and strategies in the behaviour of economic agents, both at micro and macro level. To understand foreign direct investment must first understand the basic motivations that cause a firm to invest abroad rather than export or outsource production to national firms (Denisia, 2010).

Dozens of theories have been put forward by the scholars to explain foreign direct investment. However, researchers conclude that there is not one single theory of FDI, rather than varieties of theoretical assumptions, approaches, and models (Blonigen, 2006; Faeth, 2009). Though the explicit use of FDI in the world economy, research on the factors that

determine FDI patterns on investor and recipient nations is very far from being completed and generalized (Blonigen, 2006).

#### 2.1.2.1 Macroeconomic FDI Theories

Macroeconomic approach FDI is primarily considered as abridged to the flow of capital across country borders, from origin countries to recipient countries, recorded in balance of payments accounts. the flow of capitals make rise economic growth of the host countries in the form of stocks valuing addition that the flow of FDI provides investment entities, corporations that managed and controlled by a home country owners. Under these business operations the home country holds a certain and visible share of voting right. Identifying and pointing out the macro-level determinants of FDI is important in the way of attraction of FDI for the recipient country. The macroeconomic variables include; market size, economic growth rate, GDP, infrastructure, natural resources, institutional factors such as the political stability of the country are the most interesting and vital on determent of FDI (Lipsey, 2004).

**I. Capital Market Theory**

Capital market theory additionally, known as "currency area theory" is considered one of the oldest theory that explained Foreign direct investment. Foreign investment occurred as a result of capital market imperfections and the outcome of unbalanced between source and currencies of the host country. The weaker currencies leads to have a higher FDI attraction habit and are better able to take advantage differences in the market capitalisation rate, compared to stronger country currencies (Nayak & Choudhury, 2014).

Aliber (1970; 1971) further adds that source country MNCs based in hard currency areas can borrow at a lower interest rate than host country firms because portfolio investors overlook the foreign aspect of source country MNCs. This gives source country firms the borrowing advantage because they can access cheaper sources of capital for their overseas affiliates and subsidiaries than what local firms would access the same funds for. While this capital market theory holds true in the case of developed countries such as the United States, United Kingdom and Canada, it was challenged by later scholars on the basis of ignoring basic currency risk management fundamentals. A major criticism of Aliber's theory was made by Lall (1979) when he highlighted that the theory does not apply in the case of less developed countries with highly imperfect or non-existent capital markets, and those with heavily regulated foreign exchange rates. Also, Nayak and Choudhury (2014) allude to the fact that Aliber's theory does not explain investment between two developed countries with similar strength currencies, nor how developing country MNCs with weaker currencies are able to

invest in developed countries with much stronger currencies. This they exemplified using the case of Chinese firms with sizeable investments in USA and the UK.

## II. Location-Based Approach to FDI Theories

This approach particularly concerned with the motives of location such as resource seeking, market seeking, efficiency seeking or strategic asset seeking. This made it to have microeconomic elements and influenced by a firm behaviour. However, the overview its making decision is incorporated on the basis of economic geography, which is a macroeconomic decision as it, takes cognisance of country-level characteristics (Popovici & Calin, 2014).

The theory shows the success of foreign direct investment among nations based on the national wealthy include its natural resources endowment, availability of labour, local market size, infrastructure and Government policy regarding these national resource. An off-shoot of this location-based theory is the gravity approach to FDI wherein it was assumed that FDI flows between two countries is highest, if those two countries are similar geographically, economically and culturally. Gravity variables such as size, level of development, distance, common language and additional institutional aspects such as shareholder protection and trade openness were regarded as important determinants of FDI flows (Popovici & Calin, 2014). This is however a very basic approach to the economics of FDI, because FDI flows are more complicated than just being about commonalities between nations. Being close together geographically may reduce transportation costs, but not necessarily the cost of labour, for example. Also, sharing the same culture may not necessarily result in increased profitability or trade between the two countries.

## III. Institutional FDI Fitness Theory

The FDI fitness theory stated that a country could develop its way of attraction through absorbing and retaining of FDI. The country has to the ability to adapt, or to fit to the internal and external expectations of its investors, which serves nations the upper-hand in harnessing FDI inflows. The theory tries to describe the unbalanced distribution of FDI flows between nations Wilhems and Witter (1998). FDI fitness theory includes the institutions such as government, market, educational and socio-cultural are the basic pillar of fitness. From out of them socio-cultural factors is the earliest and most complex institution.

Education is necessary encouraging the attraction environment for FDI. It provides an educated human capital results to enhance R&D creativity and information processing ability. The actual level of education does not seem to matter much for FDI as the requirements are

dependent on the various skills needs of projects to be undertaken. However what is certain is that basic education may impact on the productivity and efficiency of FDI operations, making formative education such as the ability to speak, hear, understand, interpret and implement instructions key for attracting FDI (Popovici and Calin, 2014).

Interestingly, the theory of institutional FDI fitness has been empirically tested mainly in the African context. Muthoga (2003) (as cited in Popovici & Calin, 2014), investigated FDI determinants in Kenya for the period 1967-1999, in their PhD thesis. The author found that economic openness, GDP growth rate, level of domestic investment, internal rate of return and availability of credit – all proponents of Government economic policies – enhance a country's attractiveness to foreign investors. Along the same ideologies, Musonera, Nyamulinda and Karuranga (2010) evaluated the institutional FDI fitness model in the East African Community bloc, using Kenya, Tanzania and Uganda as their sample, and data drawn from 1995 to 2007. They found that for Tanzania and Uganda, FDI inflows were predetermined by more than a single country risk factor, such as population size, size of economy, financial market development, trade openness, infrastructure and other economic, financial and political risks. Their research also further refuted the perception that FDI inflows to Africa are attracted by natural resources. This was evidenced by that Tanzania and Uganda, both resource-poor countries, were also able to attract FDI on condition that their Governments fulfil two conditions: establish macroeconomic and political stability, and introduce an efficient regulatory framework, as well as eliminate corruption.

**2.1.2.2. Microeconomic FDI Theories**

The microeconomic theory States that foreign direct investment motivations regarding to investor's behaviour that could be the same to take a firm level and industry level perspective in making a decision. This theory tries out the effects to the investor, and to home and recipient countries, of the operations of the multinationals that are created by these investments rather than the amount of the flows and the value of investment stocks or investment position. Although some nearness for the flow of intellectual capitals are the part of the current account, these effects arise from their trade, employment, production, and stocks of intellectual capital considered as the capital flows and stocks in balance of payments (Lipsey ,2004).

Most microeconomic FDI theories are postulated based on the existence of imperfect market. The decision of an MNC to invest abroad rests on certain advantages at its disposal, such as

access to raw material, economies of scale, access to labour, low transaction costs, intangible assets in the form of brands and patents, amongst others (Hymer, 1976).

**The Eclectic Paradigm**

According to Dunning (2001), firm should fulfil some requirements in order to engage in to foreign direct investment. The firm should possess net ownership advantages over other firms serving particular markets. These ownership advantages are firm specific and exclusive to that firm, in the form of both tangible and intangible assets such as trademarks, patents, information and technology, which would result in production cost reductions for the firm, enabling it to therefore compete with firms in a foreign country. These advantages were also emphasised by Hymer (1976) and Kindleberger (1969) in their market imperfections' theories on firm-specific and monopolistic advantages, respectively.

Secondly, it must be more profitable for the firm possessing these ownership advantages to use them for itself (internalisation), rather than to sell or lease them to foreign firms through licensing or management contracts (externalisation). Boddewyn (1985) refers to this as the internalisation condition. Finally, assuming that the preceding conditions are both met, it must be profitable for the firm to exploit these advantages through production, in collaboration with additional input factors such as natural resources and human capital, outside its home country; failing which, the foreign markets would then be served through exports and local markets by domestic production.

Location-specific factors have to be taken into consideration by the investing firms, as per the economic geography and institutional FDI fitness theories discussed under the macroeconomic FDI theories. Boddewyn (1985) emphasises that the more a country's firms enjoy ownership advantages, the greater the incentive they have to internalise them, and the more profitable to exploit them outside their home country, then the higher the probability of engaging in FDI and international production. Because of the interrelatedness of the three conditions, it is important that they occur simultaneously, otherwise FDI cannot occur.

The context and application of the Ownership, Location and Internalisation (OLI) paradigm differs from firm to firm, and hence the theory cannot be considered in isolation of theories which affirm the importance of the host country characteristics Although the Eclectic Theory was empirically tested by Dunning himself, it still has some limitations which critics have highlighted over the years. Boddewyn (1985) praised Dunning's theory for explaining the initial FDI decision by MNCs, but however laments the lack of explanation with regard to subsequent FDI increases, which may only require changes only in some but not necessarily

all the OLI factors. In addition to this, Shin (1998) questions the applicability of the theory to LDCs which generally do not monopolistic firm-specific advantages such as high knowledge content.

Another criticism of the eclectic theory is that it incorporates so many variables that it ceases to be operationally practical as it does not explain FDI at the firm, industry and country levels. This is on the basis that Dunning attempted to combine several complementary theories of market imperfection, which even on their own are already fairly complex (Nayak & Choudhury, 2014). To address these shortcomings, Dunning (1981) then came up with the Investment Development Cycle or Path (IDP) theory, in which he proposed a link between a country's level of economic development and its investment positions.

The IDP had four stages which followed a pattern similar to the product life cycle theory (introduction, growth, maturity and decline): no FDI; location-specific advantages arise due to Government intervention, hence attracting FDI inflows; domestic firms enjoy ownership advantages as wages rise, resulting in FDI outflows; countries finally become net outward investors in the fourth stage. The underlying hypothesis here is that due to the dynamic interaction between a country's GDP and its economic policies, these have the potential to affect both domestic and foreign firms' ownership advantages (Nayak & Choudhury, 2014). Despite these challenges, Dunning's eclectic theory however still remains the most recognised FDI theory. Another criticism of Dunning's OLI paradigm was raised by Forssbaeck and Oxelheim (2008) when they questioned the menial role assigned to financial aspects in the FDI decision.

In his defence, Dunning (1993) acknowledged the existence of a "financial asset advantage" which is a firm's knowledge of and access to foreign sources of capital, but points out that this merely a by-product of the size, efficiency and knowledge of MNCs, and not necessarily a standalone advantage. Forssbaeck and Oxelheim (2008) argue that a strong financial strategy enables a firm to minimise its cost and maximise availability of capital; thus by lowering the discount factor of any investment, that firm's likelihood to engage in FDI increases as a result of the financial advantage. To this end, they hypothesized that a firm will engage in FDI when, amongst other things, it has access to competitively priced equity, when it cross-lists its shares on a larger, more liquid stock market, when it enjoys strong investment credit ratings, and when it is able to negotiate reduced taxation and/ or attract subsidies. Forssbaeck and Oxelheim (2008) empirically tested their hypotheses using a sample of 1379 European non-financial firms' international acquisitions.

In their series of tests, they evaluated what effect including finance-specific variables has on Dunning's OLI model, and found that there was a strong explanatory power of the financial variables, thereby concluding that financial factors are equally important in explaining FDI using the OLI model. 7 Conclusion having examined the available major FDI theories, it is clear that there is no single superior theory which comprehensively explains FDI. However, as it is necessary to conduct research from a specific theoretical background, it is hoped that the above classification and analysis of FDI theories provides an adequate grounding towards selecting the most appropriate theoretical framework for future scholarly work.

### 2.2. Empirical Literature Reviews

Generally, several empirical studies have been conducted regarding to investigate the factors that determine foreign direct investment within different time periods and across various Countries. However, the findings might be varied across the researches. Therefore in this part we will look at the determinant of FDI with its empirical findings of the developing nations (Africa), inclined focuses on the context of Ethiopia.

#### 2.2.1. Factors Affect FDI in Less Developed Nations

Prince and Vijayawada (2019) had conducted an investigation in the title issued, the determinants of foreign direct investment in sub-Saharan economies. The researchers took ten sampled countries which are the members of the region and used cross-sectional data over the period 1990-2017. Under this study FDI was taken as dependent variable, whereas inflation rate, exchange rate, market size, openness and infrastructure were intended as independent variables. According to their point of views; the infrastructure has positive and significant effect on FDI, the long run coefficient of openness is positive but insignificant in both models. Pointing to the trend by increasing openness across the markets, Market size is negative in its coefficient but significant, pointing the better opportunities presented in smaller market size. Exchange rate is not significant in both models and has negative changing in short run but positive in long run model. Therefore it should be pointed out through stabilization. Finally interest rate is the factor that involved in the model to be tested. In this finding the coefficient of the long run model was significant and positive relations causes to inflationary macroeconomic conditions in the markets. But in the short run model the changing was negative but no significant shows to need the macroeconomic stabilization across the markets.

According Rhodah (2012) studied about the determinants of foreign direct investment in Kenya. The objective of the study was to examine the factors that influence FDI flows into

Kenya, specifically, the wage rate, exchange rate, trade balance, savings rate, external debt, and GDP growth rate, and inflation, openness of the economy, policy incentives and macro-economic reforms. The study used time series data collected from secondary sources for period 1970 to 2009. Regression analysis was employed, using Ordinary Least Squares (OLS) to estimate the linear model and best results reported. The results revealed that the exchange rate was the most significant variable in determining FDI inflows in Kenya. Other significant variables were trade balance, wage rate, savings rate, and openness of the economy and policy incentives. But the trade balance and wage rate had a negative effect on FDI. In addition, the rate of inflation, GDP growth rate, external debt and macro-economic reforms had negative effect on FDI inflows. Khondokeretal (2010) used panel data from 68 low-income and lower-middle income of developing countries, this study pinpoints the factors that determine FDI inflow to the developing countries. Based on a comparative discussion focusing on why some countries are successful in attracting FDI whereas others are not, the study reveals that countries with larger GDP and high GDP growth rate, higher proportion of international trade and with more business approachable environment are more successful in attracting FDI.

Money supply is an economic variable and some studies have been done to check the effect of money supply on FDI. Keynes has identified macroeconomic variable that can affect the FDI. Those macroeconomic variables include gross domestic product, interest rate, uncertainty, exchange rate, credibility, inflation, institutional factors, political factors and government expenditure. Aslamand Ghafoor (2018) investigated the relationship between monetary policy and economic growth. Correlation matrix is used to see the association between variables and results shows significant relationship between foreign direct investment and broad money.

In Malaysian financial system increase in money supply results in increasing the capitalization of listed companies of domestic market that build the confidence of international companies (Mugableh, M. I., 2015). In the process of money supply, inflation mechanism plays its role, inflation can depreciate the local currency and exchange rate will appreciate can result in increasing the exports and economic growth the will lead to foreign direct investment. Increase in money supply by the central bank will result in demand of money that will result in increase in inflation that will cause the exchange rate to increase leads to depreciation in exports and it will increase the FDI (Khan, N. U., & Ullah, M. A., 2015).

### 2.2.2. Empirical Findings of FDI in Ethiopia

Starting in the early 1990s, many studies have pointed out how foreign direct investments are affected by different factors, especially by variety macroeconomic variables applied in every investigation of the researchers.

The researcher studied to depict and examine on the determinants of foreign direct investment in Ethiopia in time series analysis model based on the critical synthesis of theoretical and empirical literature on foreign direct investment over periods 1991-2013. Researcher applied the error correction model (ECM) to estimate and analysis the data available. Under this investigation the data available were ranged annually and normally obtained from the World Bank and world development indicators report. The factors such as GDP per capital, GDP growth rate, real interest rate, inflation rate, gross capital formation, human capital, labour force growth rate, infrastructure openness and real effective exchange rate were considered as independent (explanatory) variables whereas FDI was dependent variable. According to the researcher findings; Openness and infrastructure were insignificant impact on FDI in the long run and short run models. And then, the policy decision maker should interfere to adjust the macroeconomic stabilization and to pursue economic growth. Nevertheless, all the remained had appositive effect and more significant impacted on the determinant of foreign direct investment (Dejene, 2016).

Habtamu (2019) studied FDI inflow and tried to identify the major determinants of foreign direct investment (FDI) in Ethiopia in the period of 2006-2017.Based on his result, the study conclude that the factors such as real growth domestic product, liberalization, exchange rate devaluation, and trade openness are significant and have a positively related to the inflow of FDI. On the other hand, the remain such as inflation, poor infrastructure, the volatile and high lending interest rate have significant and negatively affect to foreign direct investment. Finally, the study recommends possible intervention of the government through infrastructure development and formulation of sound fiscal and monetary policies to control the negative impact of inflation, interest rate and other macro variables.

Studies conducted by Dessalegn et al (2022) tried to identify factors that determine the flow of FDI in Ethiopia. In this study data was used based on secondary gathering system in year of 1991 to 2018 and has been analyzed using Autoregressive Distributed Lag (ARDL) model. The finding pointed out that inflation and effective exchange rate have significant and negative effect on the inflow of FDI. The study also commented the need to stabilize inflation

and minimize effective exchange rates, and develop incentives for investors especially for investors in production of import substitute and exportable items (Dessalegn et al, 2020).

Another study has been also done on the determinants of foreign direct investment in Ethiopia. The general objective of the research stranded-for to investigate the major and prominent determinants of FDI, and the findings of the study was economic growth, macroeconomic stability, openness trade are important determinants of foreign direct investment. Finally, the researcher recommended that the policy makers should give due attention to promoting liberalization and implementing sound economic policies that can ensure macroeconomic stability in the country (Tesfaye, 2019).

A researcher conducted a research about An Analysis of Foreign Direct Investment: The Case of Ethiopia and the major finding was in the long run explanatory variable such as infrastructure development, the domestic market size, Human Capital, openness, and external debt are found positively related and statistically significant while inflation rate is negatively related and statistically significant and in the short run Gross Fixed Capital Formation and inflation become negatively related an d they are statistically significant while Gross Domestic Product is positively related and statistically significant that supports the hypothesis that the intensifying economy attracts more FDI (Berhane, 2015).

**Observed Literature Gap**

The above empirical evidences have indicated that foreign direct investment in less developed nations especially Ethiopia is influenced by various factors such as market size of the economy (Gross domestic product per capital rate), consumer price index (inflation), labour forces (human capital formation), exchange rate (market currency), trade openness (the net value of import and export of the country), interest rate (the deposited value of investor) and liberalization (political stability). Such as; Dejene (2016); Habtamu (2019); Dessalegn et al (2020); Tesfaye (2019); Berhane (2015) were some of the researchers who conducted investigations on the effects of foreign direct investment in Ethiopia. Although the earlier studied were submitted on the identifying various major determinants of FDI, it can be changed and can't be single out commonly for all nations through time path. For example inflation was a significant effect on FDI in the past ten years may not be important determinants of foreign direct investment in next five years. As per the researches be conducted on the area of determinants of FDI, the potential determinants desirably encourage FDI flow in Ethiopia can be varied from time to time. Therefore the researcher comes up to

fill the gap on time scope and the extent lacks to engage the recent data (1992-2022) and tremendous growth and prevalence of foreign direct investment.

# CHAPTER THREE

# RESEARCH METHODOLOGY

This chapter presents the research methodology used to analyze the determinants of Foreign Direct Investment (FDI) in Ethiopia, emphasizing both economic and socio-political factors. The chapter includes an overview of the study area, data sources, and methods of data analysis, econometric model specifications, and variable definitions. The primary goal is to understand the factors affecting FDI flows into Ethiopia over the period 1992-2022 using secondary data, descriptive and econometric techniques, and an Autoregressive Distributed Lag (ARDL) model.

## 3.1 Description of the Study Area

Ethiopia, located in the Horn of Africa, is the second most populous nation in Africa. It has shown robust economic growth over recent decades, driven by industrialization and a strong focus on infrastructure development. The country's economic strategy emphasizes attracting foreign investment as a means of fostering technological advancement, increasing productivity, and reducing poverty. Despite these ambitions, Ethiopia’s FDI inflows are influenced by various economic factors, such as exchange rates, inflation, trade policies, and socio-political dynamics, including periods of political instability and reforms.

## 3.2. Data Type and Sources

The study uses secondary time-series data spanning from 1992 to 2022, sourced primarily from the World Bank Development Indicators (WDI) 2023. The researcher opt the World Bank's datasets as source of the data since it is known to provide reliable, high-quality information covering numerous economic and socio-political indicators across countries. Data for the dependent variable, FDI inflows and the independent variables include inflation rate, exchange rate, trade openness, wage level (proxied by GDP per capita), political instability, and government expenditure, which are also sourced from the WDI. The use of standardized and credible sources such as the WDI enhances data reliability, ensures international comparability.

## 3.3 Method of Data Analysis

The researcher has employed both Descriptive and Econometric methods of data analysis. Descriptive analysis is used to summarize and describe the characteristics of each variable. It includes statistical measures such as mean, median, and standard deviation, and also visual representations like line graphs and bar charts. This analysis helps in understanding the

distribution, trends, and volatility of the FDI inflows and other economic indicators over the study period while the econometric analysis focuses on examining both short-term and long-term relationships between FDI and its determinants using an ARDL model. The ARDL approach is advantageous because it can handle variables with mixed orders of integration (either I (0) or I(1)) without needing to transform them into a common order. The model is structured to assess the impact of each independent variable on FDI, capturing both immediate (short-run) and persistent (long-run) effects. The ARDL model will allow for dynamic insights into how Ethiopian FDI inflows respond to changes in inflation, exchange rate, trade openness, wage levels, political stability, and government spending. The data is analysed using E-Views 10 software.

### 3.4. Unit Root (Stationery) Test

A prerequisite for applying the ARDL model is to confirm that none of the variables are integrated at order two, I(2). To ensure this, the study performs unit root tests using the Augmented Dickey-Fuller (ADF) test on each variable. This test assesses the stationarity of each time series and verifies whether differencing is required. If a variable has a unit root at level, it is first-differenced to achieve stationarity, while variables stationary at level are directly included in the ARDL model. The tests are performed at a 5% significance level to establish the integration order of each variable accurately. This step is crucial for avoiding spurious results and ensuring that the ARDL model is valid for the given dataset. As this study employs time series data, an analysis of the statistical properties of each variable is essential before proceeding to the estimation of the model. This procedure will help on identifying of variables which have a problem of spurious regression. A series of Dickey-Fuller unit root tests will be conducted to test if the variables are stationary.

### 3.5 Specification of Econometric Model

The ARDL model used in this study is specifically tailored to capture the dynamic relationship between FDI and its determinants, allowing for the analysis of both short-run and long-run interactions. The general form of the ARDL (p, q) model can be specified

FDI=F (inflation rate, exchange rate, trade openness, GDP pre capital, political instability and government expenditure)

In this study the researchers specify the model by transforming most the variables into natural logarithmic form:

The specification of the ARDL model is formulated as follow:

$$\Delta LnFDI_t = \alpha_0 + \sum_{i=1}^{p} \beta_1 \Delta LnFDI_{t-1} + \sum_{i=0}^{q} \beta_2 \Delta \text{LN\_ERT}_{t-1} + \sum_{i=0}^{q} \beta_3 \Delta \text{INF\_RT}_{t-1} + \sum_{i=0}^{q} \beta_4 \Delta LnGDPk_{t-1} + \sum_{i=0}^{q} \beta_5 \Delta \text{OPPNESS}_{t-1} + \sum_{i=0}^{q} \beta_6 \Delta \text{G\_EXPND}_{t-1} + \sum_{i=0}^{q} \beta_7 \Delta \text{PL\_INS/WAR}_{t-1} + \lambda_1 LnFDI_{t-1} + \lambda_2 \text{LN\_ERT}_{t-1} + \lambda_3 \text{INF\_RT}_{t-1} + \lambda_4 LnGDPk_{t-1} + \lambda_5 \text{OPPNESS}_{t-1} + \lambda_6 \text{G\_EXPND}_{t-1} + \lambda_7 \text{PL\_INS/WAR}_{t-1} + U_t \quad \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots E.q.(1)$$

Where

$\beta_1, \beta_2, \dots \beta_9$ = represents the short run coefficients of the model

$\lambda_1, \lambda_2, \dots \lambda_9$ = represents the long run coefficients of the model

$\alpha$ = is the measure of the model's constant term.

$LnFDI_t$ =is logarithm of inward flow of foreign direct investment in to Ethiopia at time t.

$\text{LN\_ERT}_t$ = is the exchange rate that shows money parity of Ethiopian BIRR to US Dollar at different time..

$LnGDPk_t$ = the logarithm of gross domestic product per capital at time t.

$\text{INF\_RT}_t$ = represents the annual inflation rate at different time periods.

$\text{OPPNESS}_t$ =shows the level of trade openness of the Ethiopian economy at time t

$FDI_{t-1}$= the FDI cumulative stock of capital at previous time periods at t-1.

$\text{G\_EXPND}_t$= is the annual percentage of government expenditure a at time t.

$\text{PL\_INS/WAR}_t$=is a dummy variable of 1 for occurrence of war, 0 otherwise for each time period. $U_t$ = represents the disturbance or the error term.

**3.5.1 Definition and Measurement of Variables**

Foreign direct investment (LN_FDI): refers to international flow of capital owned by foreign entities across borders, through establishing business activities or through the purchase of assets there. And different factors tend to affect the level of foreign direct investment some of them are explained below.

Exchange Rate (LN_ERT): this represents the measurement of to one's domestic currency relative to foreign currency. A number of study declares that exchange rate determines foreign direct investment because it is directly related to the investments relative cost and revenue.

Income level (GDP per capita, (LN_GDPK)): Gross domestic product per capital (GDP per capital) will be used as proxy variable for wage level. According to this theory, high wage level is expected to have a negative impact on FDI volume. This is because economy with lower wage level can provide a least cost for FDI.

Inflation Rate (INF_RT): is the overall increase in the consumer price index (CPI) which is a weighted average of prices for different goods. In theory high level of inflation might cause a down turn in foreign direct investment because high levels of inflation can lead to deprecation of local currency risking reduction in the value of assets pegged to local currency relative to foreign currency.

Trade Openness (OPPNESS): is the measure of openness to international trade indicate, the extent to which the host economy is open toward the entry and exit of goods and services. It is obvious that the more the economy is open toward the entry and exit of goods and services, the incentives of foreign direct investment will increase. In this study, trade intensity or trade ratio import plus export divided by GDP is used as proxy for trade openness.

Political Instability (PL_INS/WAR): This variable accounts for the level of socio-political stability within the country, using a qualitative index or count of significant political events such as conflicts, protests, or changes in government. Political instability typically discourages FDI, as investors prefer stable environments

Government Expenditure (G_EXPND): refers the total amount of money spent as a share of gross domestic product by the government sector on the providing of goods and services in a given period of time. Government expenditure is purposing to supply goods and services that are not supplied by the private sector, like defence, roads, hospitals, schools and welfare payments and benefits including unemployment and disability benefits. In this study government spending is to be expected as positive correlation with FDI.

# CHAPTER FOUR

# RESULT AND DISCUSSION

This section of the study discusses the result of the study and it is divided in to two parts the first part is the discussion of the variables in a descriptive statistics analysis form. This includes the analysis of variables mean, standard deviation the minimum and maximum

performances of the economy. The second part is the discussion of the results of the econometric regression model. Hence, this part includes the unit root test, optimal lag length criteria, the results of the long run ARDL regression model, the result and discussion of the short run ECM and finally the model diagnosis and fitness test.

### 4.1. Descriptive Statistics Analysis

Foreign Direct Investment (FDI) refers to the investment made by a foreign entity into a business or project in another country. FDI is a critical driver of economic growth, especially in developing countries like Ethiopia, as it brings in capital, technology, and expertise that can stimulate local industries. The mean FDI inflow is 1.16 billion USD, but the median (288 million USD) is much lower, indicating a highly skewed distribution (skewness of 1.17). This shows that there were a few years of very high FDI inflows, pulling up the mean. The maximum (4.49 billion USD) and minimum (170,000 USD) values reflect large fluctuations in FDI over time. The highly standard deviation (1.50 billion USD) further supports this observation. The positive kurtosis (2.83) and the skewness suggest that a few extremely high investment years dominate the distribution. A major rise in inflow of FDI has been experienced since 2013 up until present as in comparison with the FDI performance to prior periods (pre-2013). Furthermore, as it is discussed in the figure 1 the trend of Foreign Direct Investment (FDI) from 1992 to 2008 was quite low, with only minor fluctuations. However, starting in 2009, there was a noticeable increase in FDI inflows, though the growth remained modest until about 2012. After 2013, FDI began to rise sharply, especially between 2014 and 2018, reaching new highs each year and the growth continued to rise 2022.

The exchange rate (ERT) is the rate at which one currency can be exchanged for another, in this case, it shows how much Ethiopian Birr is required to purchase one US dollar (USD). This is believed to be one of the critical determinants for foreign investors as it affects the cost of importing goods, the value of investments profits, and overall competitiveness in global markets. The mean average value of the Ethiopian exchange rate against 1 USD over the period is 15.42, indicating that, on average the Ethiopian Birr has been depreciating, reflecting inflationary pressures and other external vulnerabilities in the economy. The median value (8.97) is much lower than the mean suggesting that most of the values lie below the average with a few high values pulling the mean upward. The high standard deviation (11.78) shows significant variability in the exchange rate, implying periods of instability in the currency market.

Table 1 Descriptive statistics of the variables

| | ERT | GDPK | G_EXPND | FDI | INF_RT | OPPEN |
|---|---|---|---|---|---|---|
| Mean | 15.4209 | 441.6626 | 18.91526 | 1.16E+09 | 11.41618 | 0.351316 |
| Median | 8.96595 | 357.1179 | 17.94000 | 2.88E+08 | 9.568900 | 0.364294 |
| Maximum | 51.7562 | 857.3155 | 27.04100 | 4.49E+09 | 44.35669 | 0.530472 |
| Minimum | 2.80250 | 215.6363 | 12.69600 | 170000.0 | -8.484249 | 0.083976 |
| Std. Dev. | 11.7784 | 214.8195 | 3.861902 | 1.50E+09 | 11.61448 | 0.111048 |
| Skewness | 1.52130 | 0.687961 | 0.566729 | 1.173203 | 0.925039 | -0.434381 |
| Kurtosis | 4.80912 | 1.988746 | 2.537147 | 2.825123 | 3.994158 | 2.494208 |
| Sum | 478.047 | 13691.54 | 586.3730 | 3.60E+10 | 353.9014 | 10.89078 |
| Sum Sq. Dev. | 4161.97 | 1384422. | 447.4287 | 6.73E+19 | 4046.888 | 0.369947 |
| Observation | 31 | 31 | 31 | 31 | 31 | 31 |

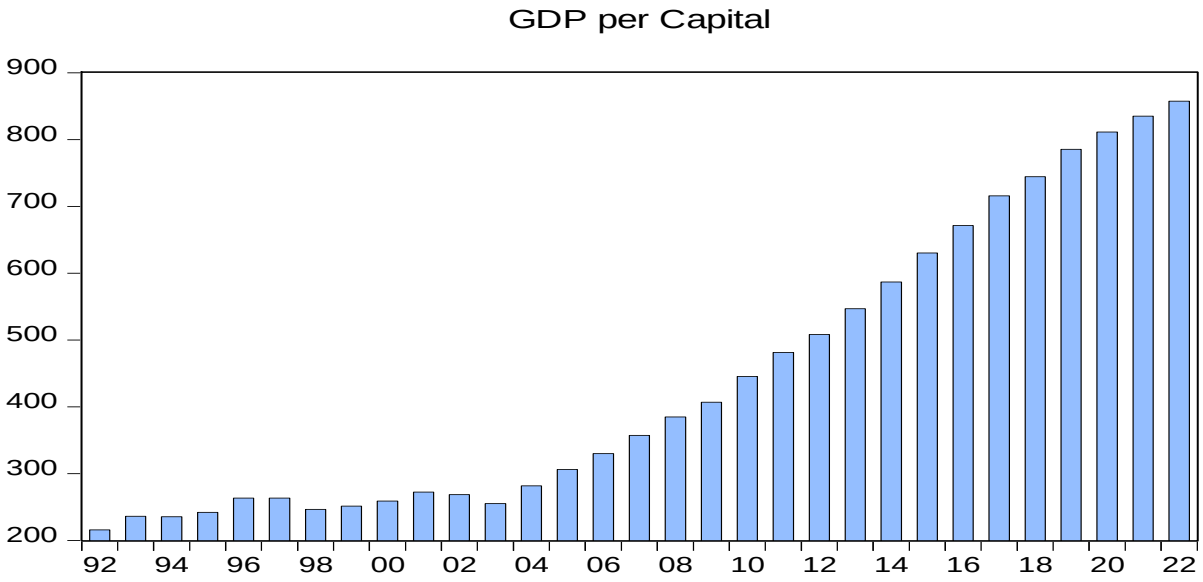
GDP per capita (GDPK) is the total value of goods and services produced within a country, divided by its population (this is used as a proxy variable for wage level). A higher GDP per capita generally suggests a more prosperous economy. The GDP per capita in Ethiopia has a mean of 441.66 USD, reflecting the country's relatively low-income status during the period. The median (357.12 USD) is lower than the mean, showing a right-skewed distribution where a few high values drive up the mean. With a standard deviation of 214.82, the data shows some variability, which shows economic ups and downs. A low level of GDP per capita may show a relatively low level of wages and this could foster the inflow of FDI because indirectly this indicates opportunity for growth and development of investments. The trend of GDP per capital as described in figure 1 shows Ethiopia's GDP per capita from 1992 to 2022. And hence, in the 1990s, it stayed mostly the same, with only small increases. Starting in the early 2000s, it began to grow slowly. Between 2003 and 2008, the growth was more noticeable as the country showed some improvements on its economy. From 2009 to 2015, the growth became faster. After 2016, the GDP per capita kept growing continuously, showing that the economy continued to improve.

Government expenditure (G_EXPND) refers to the total government spending on goods and services, which includes infrastructure, healthcare, education, and other public services. Higher government expenditure can foster growth by investing in critical areas that attract foreign investment. The annual mean of the government expenditure is 18.92% with a low standard deviation (3.86), indicating that government spending is relatively stable over time. The median (17.94%) being close to the mean reflects a fairly balanced distribution, which is

confirmed by the relatively low skewness (0.57). as depicted in figure 1 Government Expenditure as a percentage of GDP from 1992 to the late 1990s, it gradually increased reaches peak in 1999 and 2004, where it reached over 26%. This reflects a period of heavy government involvement in economic activities, possibly related to infrastructure development and public service expansion. After 2004, government expenditure began to decline steadily, falling to around 20% by 2010. This decline continued through the 2010s, with some fluctuations, and by 2022, government spending had dropped to its lowest point of around 12%. This downward trend may indicate a shift towards more conservative fiscal policies or a reduced need for large-scale government spending as the private sector and foreign investment grew. And a consistent government spending is considered to be a positive indicator for FDI, as it shows spending on infrastructure, education, or health, which are often seen as enablers of investment.

Inflation rate (INF_RT) measures the percentage change in the general price level of goods and services in an economy over time. High inflation can erode purchasing power, making the local currency less valuable and creating uncertainty for both domestic and foreign investors. The average inflation rate is 11.42%, indicating a relatively high inflationary environment during the period. The median inflation rate (9.57%) is slightly lower than the mean, suggesting that while high inflation is common, extreme inflationary periods push the average up. The standard deviation (11.61%) points to considerable volatility in inflation rates. Skewness (0.93) and kurtosis (3.99) suggest a right-skewed distribution with heavy tails, meaning that extreme inflationary points are frequent than expected under a normal distribution. A high inflation environment is generally a deterrent for FDI this is because it can erode the value of profits and makes the country less attractive destination for investors.

Trade openness (OPPEN) shows the degree to which a country engages in international trade. It is typically calculated as the ratio of exports and imports to GDP. The annual mean trade openness is 0.3513, suggesting a moderate level of international trade relative to the size of the economy. The median value (0.3643) is close to the mean, which, along with the low standard deviation (0.1110), reflects a relatively stable trade policy over time. The slight negative skewness (-0.43) indicates that there were slightly more instances of lower trade openness. Trade openness is considered to be one of the key determinants of FDI, especially for export-oriented investments. A stable trade openness ratio may be an indicator of an appealing environment for foreign investors looking to integration on into the economy.


GDP per Capital
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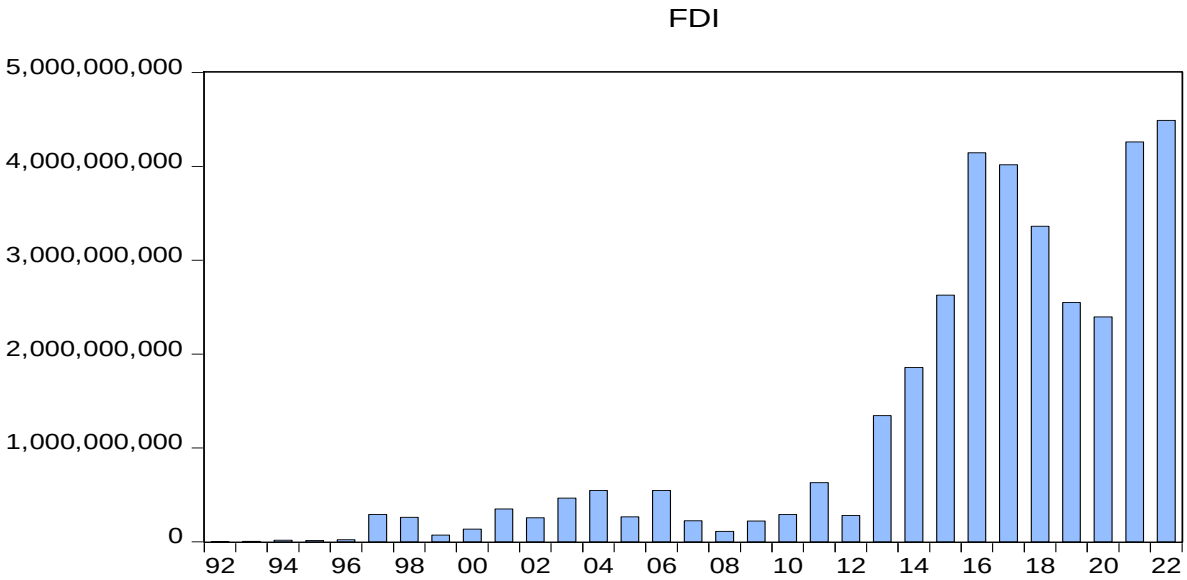
FDI
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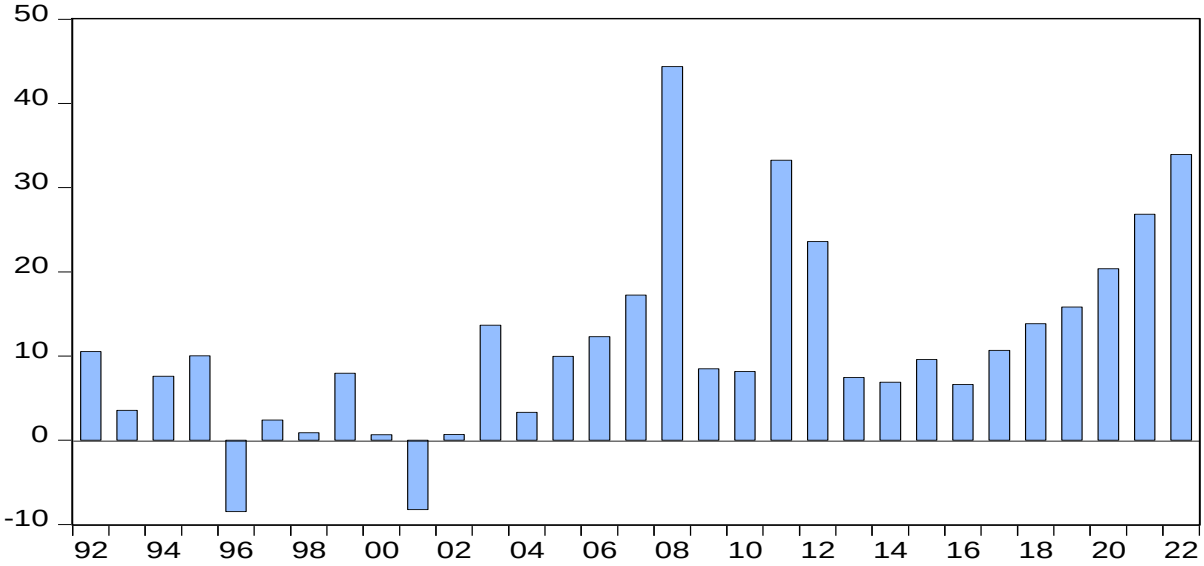
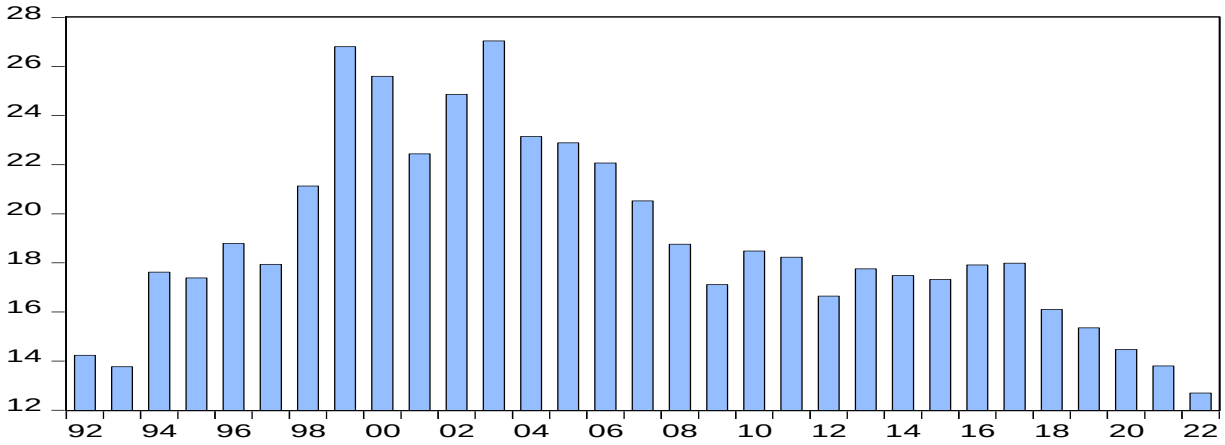
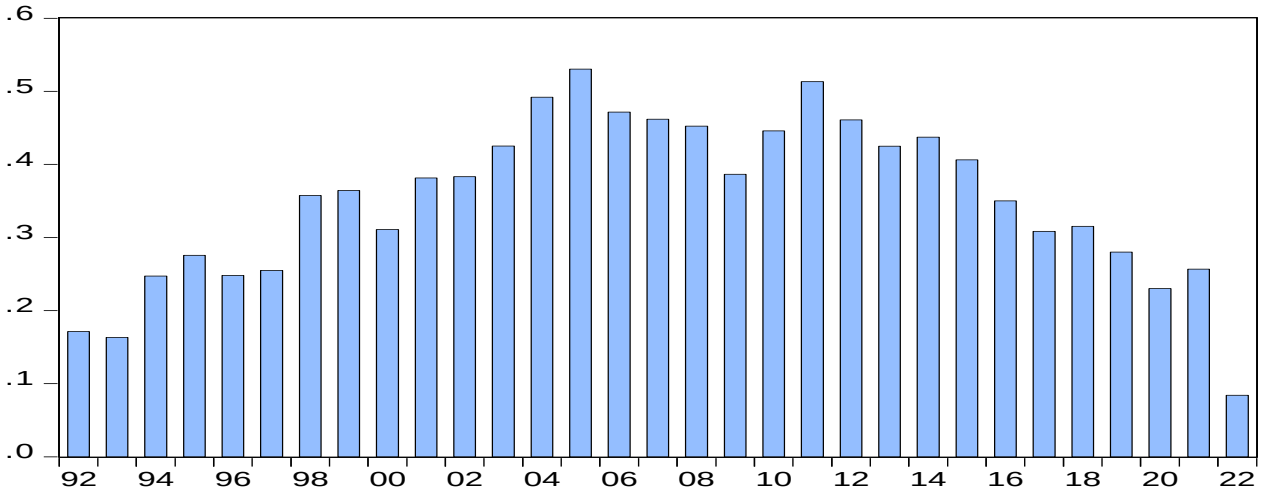
INFLATION RATE




GOVERNMENT EXPNDNDITURE(%)




OPPENESS



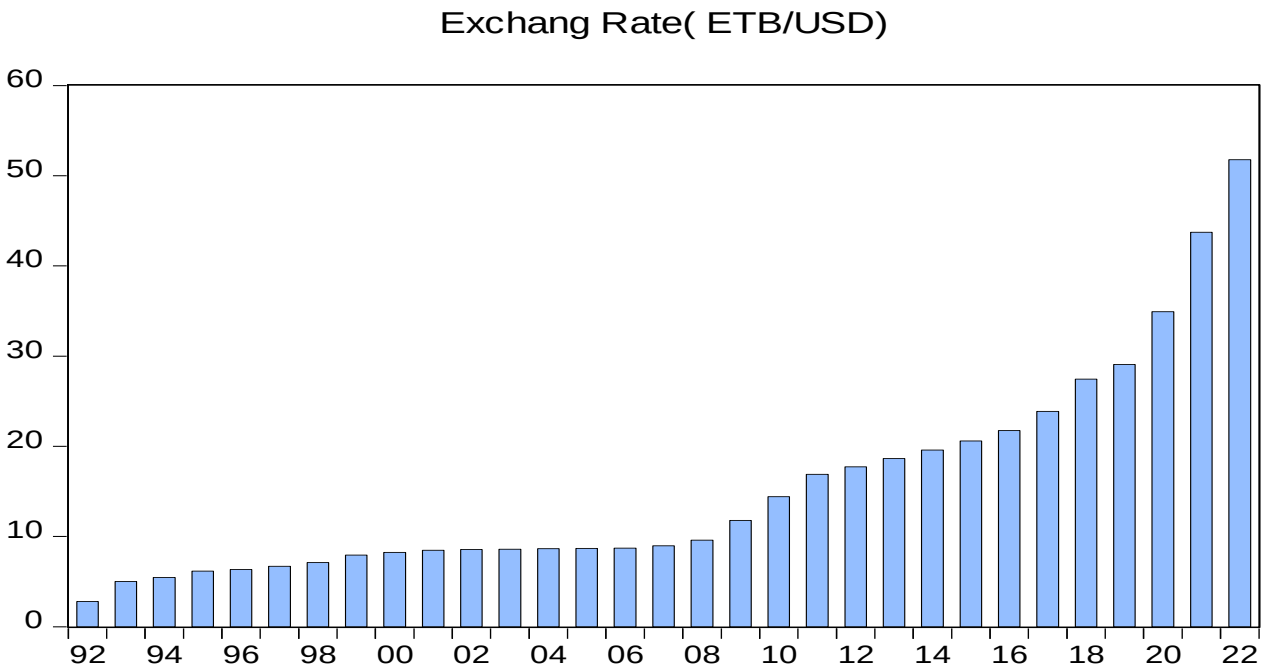


*Figure 1 graphical plot of variables*

### 4.2. ECONOMETRIC ANALYSIS

The part of the thesis describes the overall econometrical results of the study. This includes the assessment and confirmation of pre model requirements of the variables hence, before preceding to the steps regression the time series variables were checked if they are stationery at level or at first difference. And after that the optimal lag selection criteria was determined. This was followed by the ARDL bound test to see if the variables of interest are co-integrated at long run. And the short run ECM model and the long run ARDL are discussed. Finally the diagnosis test of the models normality, heteroscedasticity, serial correlation and the stability of the model and fitness are examined.

#### 4.2.1. Unit Root (Stationary) Test

A stationary test is a tool that assess whether a time series dataset maintains a constant mean, variance, and autocorrelation over time (stationary) or displays varying statistical properties (non-stationary). The presence of a unit root indicates non-stationarity in the time series, meaning that the characteristic equation of its autoregressive process has a root of (1 0. This characteristic equation suggests that the series has a random trend that does not return to a stable mean over time. One widely used common tests for detecting unit roots is the augmented Dickey-Fuller (ADF) test. Confirming the stationarity of the time series variables is a crucial step before conducting regression and econometric analysis. Therefore, the

researcher performed unit root tests using the augmented Dickey-Fuller (ADF), and the results are presented as follow.

Table 1 Result of unit root test

| Variable | Augmented Dickey Fuller(ADF) | | | | | |
|---|---|---|---|---|---|---|
| | @ Constant | | | @ Constant and Trend | | |
| | Statistics | Order of integration | Prob. | Statistics | Order of integration | Prob. |
| LN_FDI | -3.378731* | *I(1)* | 0.0209 | *-5.081704** | *I(0)* | *0.0015* |
| INF_RT | -7.100099 | *I(1)* | 0.000 | -7.080172* | *I(1)* | 0.0000 |
| G_EXPND | -2.334309** | *I(1)* | 0.0691 | -5.556944** | *I(1)* | 0.0005 |
| PL_INS(WAR) | -2.720624 | *I(0)* | 0.0832 | -4.246796* | *I(1)* | 0.0123 |
| LN_GDPK | -1.743945** | *I(1)* | 0.3989 | -4.437080* | *I(0)* | 0.0087 |
| LN_ERT | -7.342956* | *I(1)* | 0.0000 | -8.152064* | *I(1)* | 0.0000 |
| OPPNESS | -1.274921 | *I(1)* | 0.6261 | -5.918457* | *I(1)* | 0.0002 |
| * at 5 % significance level ** at 10% significance level | | | | | | |

The Augmented Dickey-Fuller (ADF) unit root (stationarity) test results of the variables show that two (2) of the seven (7) variables are integrated and stationary at constant and trend level I(0). . And the remaining five (5) out of seven variables are integrated and become stationary following at first difference I(1). This indicates that all of the model's variables are free of the unit root problems hence are stationary variables and are fit to regression. The lag length selection criteria are provided as follow.

**4.2.2. Lag Length Selection Criteria**

The results of the Lag Order Selection Criteria provide information for determining the appropriate lag length in the ARDL model. This is crucial since it helps us to select the right lag length ensures that the model captures the dynamics of the variables correctly by avoiding issues like autocorrelation or overfitting. Typically the AIC (Akaike Information Criterion) balances model fit and complexity by penalizing the number of parameters. The model with the lowest AIC is considered optimal. Here, the AIC reaches its lowest value (0.396184) at lag 2, indicating that this is the most appropriate lag length to balance model fit and complexity. Based on the results, lag 2 seems to be the optimal lag length for the ARDL model, as it minimizes the AIC, FPE, and HQ criteria. The SC criterion, on the other hand, suggests that lag 1 might be preferable to avoid overfitting by minimizing the number of

parameters, but this criterion is often considered overly conservative for time series models where dynamics are more complex. Hannan-Quinn Criterion (HQ) provides another balance between goodness of fit and model complexity but with a penalty between AIC and SC. The lowest HQ value (1.946636) occurs at lag 2, supporting the selection of 2 lags for the ARDL model.

*Table 3 the optimal lag length selection criteria*

VAR Lag Order Selection Criteria

Endogenous variables: LN_FDI INF_RT G_EXPND LN_GDPK LN_ERT OPPNESS PL_INS(WAR)

Sample: 1992 2022

| Lag | LogL | LR | FPE | AIC | SC | HQ |
|---|---|---|---|---|---|---|
| 0 | -147.9889 | NA | 0.000103 | 10.68889 | 11.01892 | 10.79225 |
| 1 | 27.53718 | 254.2101 | 1.86e-08 | 1.962953 | 4.603248* | 2.789860 |
| 2 | 99.25533 | 69.24511* | 7.61e-09* | 0.396184* | 5.346738 | 1.946636* |

Selecting lag-two (2) means that this ARDL model will capture the dynamics of the variables more comprehensively by allowing it to account for the inter-relationships between the variables over two (2) time periods. This is important because FDI inflows, inflation, government expenditure, and other macroeconomic variables often show lagged effects. Generally, based on the VAR Lag Order Selection Criteria, selecting lag 2 for the ARDL model appears to be the most appropriate choice, as it offers a good balance between model fit and parsimony, supported by the majority of the selection criteria (AIC, FPE, HQ).

**4.2.3. ARDL Co-Integration (F-Bound) Test**

The ARDL bounds test is used to check for the existence of a long-run relationship between the dependent variable and the set of independent variables. In this case, the test investigates whether there is a co-integration relationship between FDI and the explanatory variables (inflation rate, government expenditure, GDP per capita, exchange rate, trade openness, and political instability) in Ethiopia. The decision of the co-integration is based on the result of F-Statistics and the bounds (the upper and lower bounds). Hence, if the F-statistic exceeds the upper bound critical value (I(1)), the null hypothesis of no co-integration is rejected, indicating the presence of a long-run relationship. If the F-statistic falls below the lower

bound (I(0)), the null hypothesis cannot be rejected, implying no co-integration. If the F-statistic lies between the lower and upper bounds, the result is inconclusive.

*Table 4 the long run co-integration test*

F-Bounds Test Null Hypothesis: No levels relationship

| Test Statistic | Value | Signif. | I(0) | I(1) |
|---|---|---|---|---|
| F-statistic | 6.548280 | 10% | 1.99 | 2.94 |
| k | 6 | 5% | 2.27 | 3.28 |
| | | 2.5% | 2.55 | 3.61 |
| | | 1% | 2.88 | 3.99 |

The result shows that, the F-statistic value of 6.5483 exceeds the upper bound critical value at all significance levels. And since the F-statistic is greater than the upper critical values at all levels, we can reject the null hypothesis and conclude that there is evidence of a long-run co-integration relationship between FDI and the explanatory variables (inflation rate, government expenditure, GDP per capita, exchange rate, trade openness, and political instability) in Ethiopia. This means that these variables move together in the long run, despite short-term fluctuations. The existence of co-integration indicates that the factors considered in the model are important determinants of FDI in Ethiopia over the long term. The presence of co-integration supports the use of an ARDL model to explore both short-run dynamics and long-run relationships.

**4.2.4. The Short Run ARDL/ ECM Result**

The short-run Error Correction Model (ECM) in this case shows the short-term dynamics and adjustments towards the long-run equilibrium. This analysis focuses on the immediate impacts of key variables on FDI, as well as how the short-run imbalances are corrected over time. The dependent variable in this model is the first difference of the log of FDI (D(LN_FDI)), which captures the short-term changes in FDI inflows. The result table is provided as follow.

Table 5 the short run ECM result

ARDL Error Correction Regression

Dependent Variable: D(LN_FDI)

Selected Model: ARDL(1, 2, 0, 2, 0, 0, 0)

Sample: 1992 2022

ECM Regression

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(INF_RT) | -0.010286 | 0.003074 | -3.345643 | 0.0038* |
| D(INF_RT(-1)) | 0.016769 | 0.004201 | 3.991371 | 0.0009* |
| D(OPPNESS) | -0.268788 | 0.631415 | -0.425692 | 0.6757 |
| D(OPPNESS(-1)) | -4.694039 | 0.837496 | -5.604846 | 0.0000* |
| CointEq(-1)* | -0.785953 | 0.091392 | -8.599828 | 0.0000* |

| | | | |
|---|---|---|---|
| R-squared | 0.776427 | Mean dependent var | 0.107171 |
| Adjusted R-squared | 0.739164 | S.D. dependent var | 0.355560 |
| S.E. of regression | 0.181592 | Akaike info criterion | -0.418527 |
| Sum squared resid | 0.791413 | Schwarz criterion | -0.182786 |
| Log likelihood | 11.06864 | Hannan-Quinn criter. | -0.344696 |
| Durbin-Watson stat | 2.347032 | | |

Where, * 1% significance level, ** 5% significance level, *** 10% significance level

As described in table 5 above in the short run, the current inflation rate (D(INF_RT)) has a negative coefficient of -0.010286 and is statistically significant, with a t-statistic of -3.345643 ($p = 0.0038$). This indicates that a rise in inflation reduces FDI inflows in the short term. The immediate negative effect of inflation suggests that macroeconomic stability is critical for attracting foreign investors. High inflation leads to price volatility and uncertainty, which discourage foreign direct investment and this is consistent with studies like Haftu et al. (2020). However, the one year lagged value of inflation rate (D(INF_RT(-1))) shows a positive and statistically significant relationship with FDI, with a coefficient of 0.016769 and a t-statistic of 3.991371 ($p = 0.0009$). This highlights that investors tend to adjust to inflation over time, suggesting that while inflation initially reduces FDI, investors may return once

they account for inflationary pressures in their strategies. This result aligns with findings by Tessema and Abdella (2019), who observed that inflation's impact on FDI diminishes as investors rearrange their expectations.

Regarding trade openness (D(OPPNESS)), the coefficient is -0.268788, but the relationship is statistically insignificant with a t-statistic of -0.425692 (p = 0.6757). This suggests that short-term changes in trade openness do not have a strong influence on FDI in Ethiopia. Short-term fluctuations in trade policies or market openness may take longer to involve in FDI decisions, as foreign investors require time to adapt to new trading environments. In contrast, the lagged trade openness variable (D( OPPNESS(-1))) has a significant and large negative effect on FDI, with a coefficient of -4.694039 and a t-statistic of -5.604846 (p = 0.0000). This result may reflect the initial market disruption caused by rapid liberalization, which can deter FDI. This finding is consistent with studies like Getinet and Hirut (2021), who argue that sudden policy shifts in trade openness may introduce uncertainty, causing FDI to decrease in the short term.

The error correction term (ECT (-1)) is a key indicator of the speed of adjustment toward the long-run equilibrium. The coefficient is -0.785953, with a t-statistic of -8.599828 (p = 0.0000), indicating that approximately 79% of the short-run deviation from the long-run equilibrium is corrected in the next period. This suggests a relatively fast adjustment process, meaning that short-run disturbances in FDI flows are quickly corrected, allowing the economy to return to its long-run equilibrium path. The significance of the error correction term shows the stability of the long-term relationship between FDI and its determinants.

To sum up, the short-run ECM results reveals that inflation negatively impacts FDI in the immediate term, but past inflation has a positive effect as investors adapt to macroeconomic conditions. Trade openness, while important in the long run, shows a more complicated short-run dynamic, where sudden policy shifts can primarily deter foreign investment and the strong error correction term(ECT) indicates that despite short-term shocks, the economy quickly reverts to its long-run equilibrium.

### 4.2.5. Long Run Results of the ARDL Model

The result of the long-run ARDL model shows the important macro-economic variables that are bound to affect the inflow of foreign investments in to Ethiopian economy. Hence, to begin with, the inflation rate's (INF_RT) negative coefficient (-0.057) shows that higher inflation has a detrimental significant negative effect on FDI inflows. This result is statistically significant (p = 0.0009), implying that inflation decreases the real value of

investments and increases uncertainty for foreign investors. This finding is in line with other research, such as that of Haftu et al. (2020), who argued that macroeconomic instability which driven by inflation discourages foreign investors from making long-term commitments in developing countries. Furthermore, Asiedu (2006) also supports this conclusion, noting that inflation is a key deterrent to FDI in Sub-Saharan Africa, as it makes future returns more unpredictable.

The exchange rate (LN_ERT) has a significant positive relationship with FDI inflows, with a coefficient of 2.446 and a p-value of 0.0027. This result suggests that exchange rate depreciation makes Ethiopian assets more attractive to foreign investors by lowering the relative cost of investment. This implies that foreign investors can acquire Ethiopian assets at lower costs when the local currency weakens. This finding is consistent with Tessema and Abdella (2019) who found that a depreciating currency encourages FDI by making local inputs cheaper and improving competitiveness for export oriented industries. This indicates that Ethiopia's exchange rate policy plays a crucial role in attracting FDI, particularly in industries seeking to take advantage of cheaper production costs.

Trade openness (OPPNESS) also plays a vital role in influencing FDI, with a coefficient of 3.872 and a significant p-value of 0.0074. A more open trade environment appears to facilitate the entry and operations of foreign investors by reducing trade barriers and encouraging integration into the global market. This finding is consistent with the results of Getinet and Hirut (2021), who emphasized that liberal trade policies are crucial for attracting FDI in Ethiopia. And hence, increased trade openness not only allows easier access to foreign markets but also signals the government's commitment to liberal economic policies, which is an attractive feature for foreign investors looking for stability and predictability in policy.

Government expenditure (G_EXPND), on the other hand, exhibits a negative but statistically insignificant effect on FDI (coefficient of -0.073, $p = 0.1742$). The negative sign could indicate that excessive or inefficient government spending might crowd out private investment, including FDI. This could be due to the misallocation of resources or fiscal deficits created by high spending, which may reduce the availability of capital for private sector development. Tekalign (2018) supports this finding by arguing that high levels of government expenditure, especially when inefficiently directed, could deter foreign investment by creating economic distortions or increasing national debt, which could, in turn, lead to macroeconomic instability. However, since the result is not statistically significant,

this suggests that government expenditure may not be a primary concern for foreign investors in the Ethiopian context.

Table 6 the long run ARDL result

| Levels Equation | | | | |
|---|---|---|---|---|
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| INF_RT | -0.057026 | 0.014207 | -4.013891 | 0.0009* |
| LN_ERT | 2.446853 | 0.697932 | 3.505864 | 0.0027* |
| OPPNESS | 3.872442 | 1.273731 | 3.040236 | 0.0074* |
| G_EXPND | -0.072921 | 0.051417 | -1.418229 | 0.1742 |
| LN_GDPK | -2.065286 | 1.166693 | -1.770205 | 0.0946*** |
| PL_INS(WAR) | -0.106022 | 0.205004 | -0.517169 | 0.6117 |
| C | 15.44980 | 5.924544 | 2.607762 | 0.0184** |

Where, * 1% significance level, ** 5% significance level, *** 10% significance level

The GDP per capita (LN_GDPK) has a negative long term relationship with FDI inflows, with a coefficient of -2.065 and a p-value of 0.0946, significant at the 10% level. This variable is used as proxy for the wage rate level. Hence, this result suggests that as Ethiopia's GDP per capita increases (wage rate increases), FDI inflows might decrease slightly. One possible explanation is that Ethiopia's low GDP per capita historically attracted cost-sensitive investors seeking cheap labor and as the economy grows and wages rise, the country may become less attractive to investors looking for low-cost production advantages. In his study Seid (2018) found similar results in Ethiopia, where certain types of FDI particularly those focused on labor-intensive industries declined as wages rose, even as the overall economy grew.

Political instability, represented by the dummy variable for war (PL_INS/WAR), shows a negative but statistically insignificant coefficient (-0.106, p = 0.6117). This suggests that, while political instability typically deters FDI, it may not have had a significant impact on foreign investment decisions in Ethiopia during the study period. Other studies, such as Alemu (2020), have shown that political instability has a more destructive effect on FDI when it is persistent or when conflicts are particularly severe. However, the insignificance of this variable in the current analysis may imply that Ethiopia's political environment, while

occasionally unstable, was not perceived as a major deterrent by investors compared to other economic factors like inflation or exchange rates.

The constant term in the model is statistically significant (coefficient of 15.450, p = 0.0184), capturing other factors not included in the model that influence FDI. This implies that there are additional determinants of FDI in Ethiopia, such as institutional quality, infrastructure, or regional integration that may play a significant role in attracting foreign investment but were not directly accounted for in this analysis because there is no data for such variables

In conclusion, the long-run ARDL model indicates that inflation, exchange rate, and trade openness are the most significant determinants of FDI in Ethiopia. High inflation deters investment by creating uncertainty and eroding returns, while exchange rate depreciation and increased trade openness promote FDI by making local assets cheaper and improving market access. The insignificant effects of government expenditure and political instability suggest that these factors may not be as influential in the Ethiopian context as previously thought, although inefficiencies in government spending could still pose long-term risks to investment. These findings are consistent with other research on FDI determinants in Ethiopia, highlighting the importance of macroeconomic stability, favorable exchange rate policies, and open trade regimes in attracting foreign investment.

### 4.2.6. Post Regression Diagnosis Test

The post regression diagnosis of the time series data and fitness of the model includes tests like the if the assumptions of homoscedasticity of the residuals hold true, the error terms are normally distributed around zero mean and the ARDL model are stabile of etc.. The value adjusted R-square that is a measure of overall quality of the model, is 0.7391 this shows that the independent variables explain approximately 73.91% of the variance in the dependent variable, while the remaining 26.09% is explained by factors outside the model. The Durbin-Watson statistic 2.34 shows that the model is free from problems of serial auto correlation.

#### A. Normality Test

The normality test is characterized by symmetric bell-shaped curve, with the majority of the clustered around the mean (zero) and relatively few extreme values in the tails of the distribution. In order to say our models residuals are normally distributed we need to conduct this normality test.

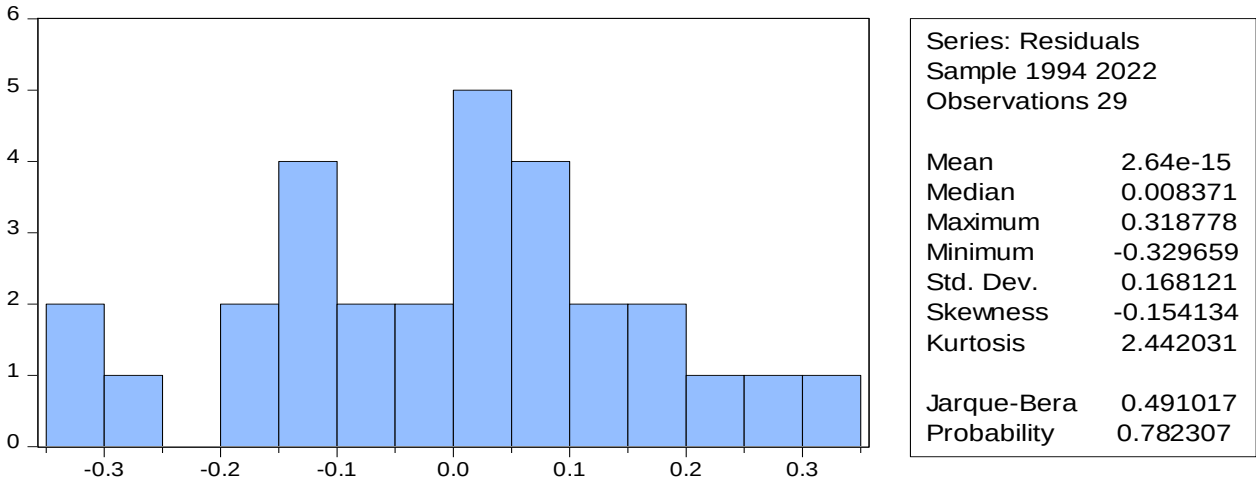



*Figure 2 normality test*

The result of the normality test as shown in the above figure 2 the Jarque-Bera result 0.4910017 is significant since the probability 0.7823(78.23%) is greater than p>0.05(5%). So, from the above result we can be sure that the model follows a normal distribution of error terms.

**B. Heteroscedasticity Test**

Heteroscedasticity refers to the situation in which the variability of the errors (or residual's) in a regression model is not constant across different levels of the independent variables. So the researcher conducted heteroscedasticity test to see if the error term has a consistent variance. The researcher has adopted the Breusch-Pagan-Godfrey test of heteroscedasticity.

Table 7.Heteroscedasticity test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| | | | |
|---|---|---|---|
| F-statistic | 1.840697 | Prob. F(11,17) | 0.1251 |
| Obs*R-squared | 15.76427 | Prob. Chi-Square(11) | 0.1501 |
| Scaled explained SS | 3.905892 | Prob. Chi-Square(11) | 0.9726 |

The Breusch-Pagan-Godfrey test results show that the probability of the Prob. Chi-Square for the model is 0.1501 (15.01%). Since this result is greater than p>0.05 (5%), we can't reject the null hypothesis that there is no problem of heteroscedasticity in the variance of the error term at the 5% level of significance and conclude that the variance of the error term is homoscedastic (constant) and hence is good fit.

C). Auto-correlation test

Is the serial correlation or the correlation of a time series data with its lagged value. hence, it shows the degree to which a series is correlated with its past or its lagged value. In a time series data, if the tests indicate significant autocorrelation it means that the assumption of independent errors is violated. So to test the existence of serial correlation, the Breusch-Godfrey Serial Correlation LM Test was applied.

*Table 8 serial correlation LM test*

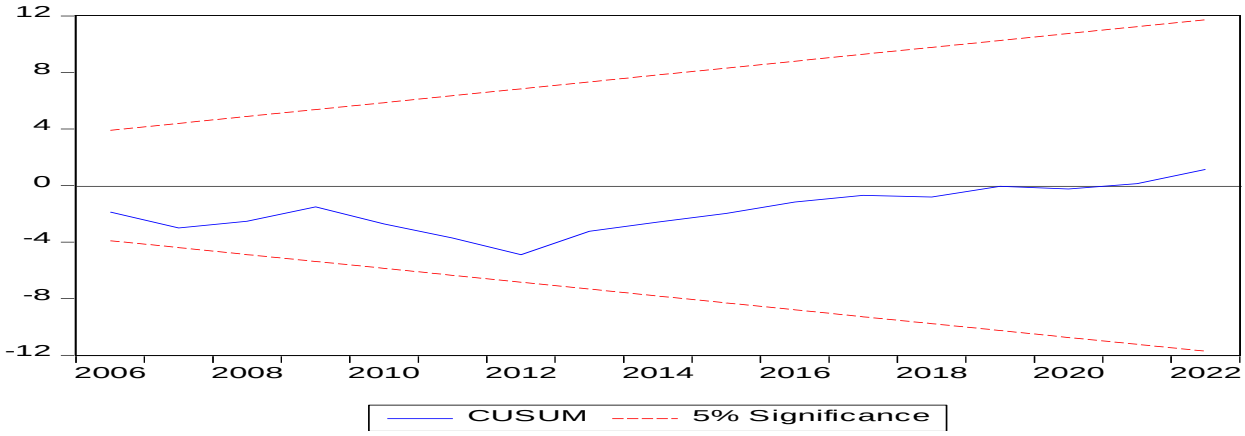
Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---|---|---|---|
| F-statistic | 1.125863 | Prob. F(2,15) | 0.3503 |
| Obs*R-squared | 3.785132 | Prob. Chi-Square(2) | 0.1507 |

The test results reveal that the prob. Chi-square for the model is 0.1507 (15.07%), which is more than 0.05 (5%). hence, we accept the null hypothesis and conclude that there is no serial autocorrelation in the random variables at 5% significance level and hence, there is no serial autocorrelation in the model.

D). Model stability test

The CUSUM (cumulative sum) test is a statistical tool used to assess the stability of regression model over time. It is particularly useful in the context of time series analysis, where there may be concerns about whether the relationship between the independent variables remains stable overtime.



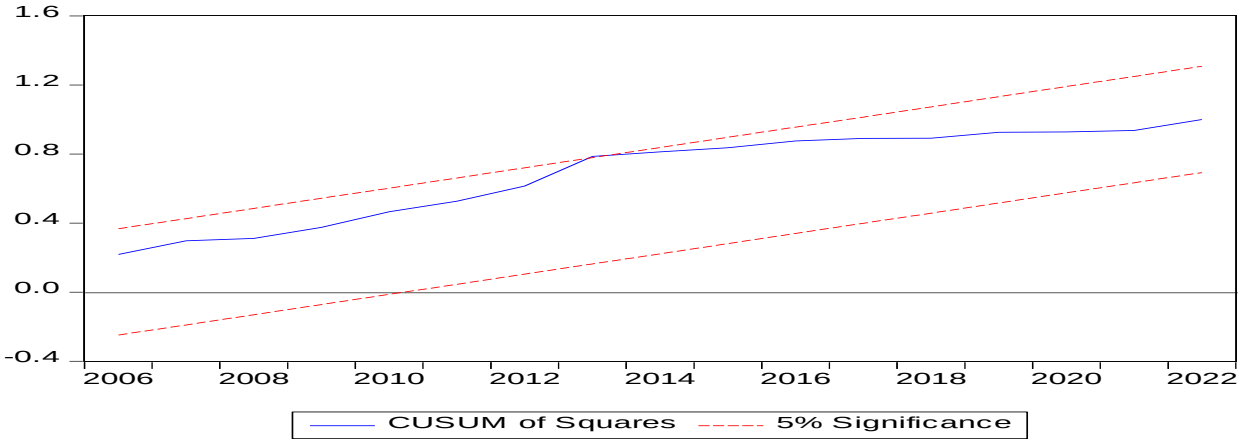



Figure 3 stability test

As it can be shown in the above figure 3, the CUSUM and CUSUMSQ line is in between the upper and lower bound significance level. Hence this shows the model's assumption of stability is hold true at 5% level of significance.

# CHAPTER FIVE

# CONCLUSION AND RECOMMENDATION

## 5.1. Conclusion

The main objective of this study is to recognize the determinants of Foreign Direct Investment (FDI) in Ethiopia over the period 1992–2022, using annual time-series data. The study incorporates both descriptive statistical analysis and econometric modeling through the Autoregressive Distributed Lag (ARDL) approach to distinguish the nature of both short-run and long-run relationships among the given macroeconomic variables influencing FDI inflows in the country.

The descriptive results show that FDI inflows in Ethiopia have been fluctuated over the years.this enforces to change the country's economic situation, policy regimes, and othe external influences. Though FDI has indicated an upward trend, particularly after 2013, its magnitude remains relatively low compared to other developing countries in Sub-Saharan Africa. This causes the structural challenges in Ethiopia's economy, including macroeconomic instability, infrastructural bottlenecks, and policy inconsistencies. However, it also highlights the potential of the Ethiopian market, given its large population, strategic location, and ongoing efforts toward industrialization and trade liberalization.

The econometric findings verify the existence of a long-run equilibrium relationship between FDI inflows and the critical macroeconomic variables such as inflation rate, exchange rate, GDP per capita, government expenditure, trade openness, and political instability. This implies that these variables jointly explain the long-term movement of FDI inflows in Ethiopia.

In the long-run estimation results, the study found that:

- Inflation rate has a negative and statistically significant effect on FDI inflows. This reflects that higher inflation creates macroeconomic uncertainty, reduces real returns on investment, and discourages foreign investors. Persistent inflation also signals weak monetary discipline and economic instability, which reduce investor confidence.
- Exchange rate is found to have a positive and significant relationship with FDI. This indicates that the depreciation of the Ethiopian birr makes domestic assets and production costs relatively cheaper for foreign investors, enhancing the competitiveness of export-oriented sectors. However, excessive exchange rate volatility could still deter investment due to uncertainty about future profitability.

- Trade openness exhibited a positive and significant impact on FDI inflows. This result highlights the importance of international integration, market access, and liberal trade policies in attracting FDI. A more open economy signals a welcoming investment climate and allows investors to benefit from export opportunities and global value chains.
- Government expenditure, though negatively related to FDI inflows, was statistically insignificant. This may suggest that public spending in Ethiopia has not been efficiently directed toward productive sectors that complement private and foreign investment. Much of the government expenditure may have been absorbed by recurrent costs rather than infrastructure or industrial support.
- GDP per capita had a weak and negative relationship with FDI inflows. This could indicate that as domestic income levels rise, Ethiopia's cost advantage diminishes, reducing its attractiveness to cost-seeking foreign investors. However, higher income levels could also attract market-seeking FDI, suggesting the need for sector-specific investigation.
- Political instability showed a negative and insignificant effect on FDI inflows. Although the variable was not statistically significant, the negative sign aligns with theoretical expectations. Political instability and social unrest can reduce investor confidence and raise the perceived risk of doing business, which may lead investors to delay or withdraw planned investments.

  The Error Correction Model (ECM) confirmed that deviations from the long-run equilibrium are corrected by approximately 79% each year, indicating a rapid adjustment toward equilibrium. This suggests that the FDI inflows in Ethiopia respond relatively quickly to changes in macroeconomic fundamentals and that the relationship between FDI and its determinants is stable and self-correcting over time.

  Diagnostic tests, including normality, heteroscedasticity, serial correlation, and model stability tests (CUSUM and CUSUMSQ), all confirmed the validity and robustness of the model, reinforcing the reliability of the empirical findings.

  Finally, the findings of this work highlights that macroeconomic stability, sound exchange rate management, trade openness, and political and institutional stability are crucial factors for sustaining foreign investment inflows into Ethiopia. The results also depict that national policies aiming to control inflation, promote exports, and improve infrastructure can substantially enhance the country's attractiveness to global investors. Although Ethiopia has made progress in creating an enabling environment for FDI, further reforms and policy consistency are still needed to allow its full investment potential.

### 5.2 Policy Recommendations

According to the empirical findings and the theoretical framework of this study, the following policy implementations are put forward to enhance Ethiopia's potential to attract and uphold foreign direct investment inflows.

- Since macroeconomic stability is essential to attract and preserve foreign investors, the government should implement fiscal and monetary policies aimed at sustain low and stable general price level (inflation rates). Persistent inflation reduces purchasing power, increases business risks, and impairs the rivals of domestic firms. Therefore, highly monetary control, wise public spending, and develop actions between fiscal and monetary policies are fundamental to improve price stability and enhance investor's confidence.
- A stable and competitive exchange rate is crucial for attracting export-oriented and efficiency-seeking FDI. While a moderate depreciation of the local currency can make Ethiopia more attractive to foreign investors, excessive exchange rate volatility can discourage investment due to uncertainty about future profits. Therefore, the government and the National Bank of Ethiopia should adopt a managed float exchange rate system that aligns with macroeconomic fundamentals, ensures predictability, and minimizes speculative shocks.
- The positive impact of trade openness on FDI inflows implies that continued liberalization and global integration can attract more foreign investors. Policymakers should Simplify customs procedures and reduce non-tariff barriers,Strengthen regional trade ties through the African Continental Free Trade Area (AfCFTA); and Promote export-oriented industries through incentives, logistics improvements, and trade facilitation reforms. Such measures will expand market access, reduce transaction costs, and position Ethiopia as a competitive hub for regional and global trade.
- Although government spending currently has an insignificant impact on FDI inflows, improving the quality and productivity of public expenditure can indirectly foster investment. The government should prioritize capital expenditure in sectors that complement private investment, such as infrastructure (energy, roads, and telecommunications), education, and healthcare. Efficient allocation of public resources enhances the productivity of the economy and reduces the cost of doing business, making Ethiopia a more attractive destination for foreign investors.
- Political stability, peace, and good governance are prerequisites for sustained FDI inflows. The government must continue efforts to promote peaceful conflict resolution, institutional transparency, and policy continuity. Strengthening democratic governance, minimizing

bureaucratic inefficiencies, and ensuring consistency in investment laws are crucial steps toward creating a predictable and secure investment climate.

- Investment in reliable and modern infrastructure—such as transport networks, power supply, water systems, and digital connectivity—is essential to attract both domestic and foreign investors. Infrastructure bottlenecks remain one of the major obstacles to FDI in Ethiopia. Public-private partnerships (PPPs) should be encouraged to mobilize financing for large-scale infrastructure projects that directly support industrialization and export-oriented investment.
- Ethiopia's FDI inflows have been concentrated in a few sectors such as manufacturing, agriculture, and construction. The government should encourage diversification into technology, renewable energy, tourism, logistics, and service sectors to maximize the developmental impact of FDI. Incentive schemes should prioritize investments that enhance value addition, technology transfer, and employment creation rather than resource extraction or import substitution.

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