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Institutions and Foreign Direct Investment Flows in Sub-Saharan Africa

HAWLET FENTA BIZUAYEN

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Institutions and Foreign Direct Investment Flows in Sub-Saharan Africa

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HAWLET FENTA BIZUAYEN

Supervisor: Prof. Befekadu Degefe

Addis Ababa University

Addis Ababa, Ethiopia

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Abstract

In many developing economies including Sub-Saharan African countries characterized by low per capita real income, high population growth rate, high rates of unemployment, dependence on the primary sector, dependence on exports of primary commodities, and a high level of poverty, and also a low level of domestic investment. By then savings-investment gap occurs. Those problems are unacceptable and have to change. To increase GDP growth, saving, and investment; these countries needed Foreign Direct Investment (FDI) as a significant source of capital inflows to fill the gap to sustain economic growth. Hence, this study aimed at identifying the effect of institutions on foreign direct investment for Sub-Saharan African countries. To do so it used the panel data collected from database of World Governance indicators and Development indicators of 21(twenty-one) selected sample countries of the region observed from year 2002-2019. It used descriptive statistics and econometric analysis techniques. It employed the dynamic panel model of System GMM estimator of Arellano and Bover (1995) and Blundell and Bond (1998) for econometrics analysis part. The study found that institutions are one of the key factors of foreign direct investment in the host countries. Among the key basic institutional factors: from governance indicators such as governance effectiveness, control of corruption and regulatory quality, and in case of the control variables: market size, infrastructural condition, resources availability, macroeconomic stability, and openness indicators have been explored their effects on FDI flows to the region. Governance effectiveness, control of corruption, GDP per capita, population, infrastructure (telephone subscription), access to electricity, and skilled labor force (school enrolment) are key fundamental factors and have good potential to attract foreign direct investment flow to the host countries in the SSA region.

Key Words: Sub-Saharan Africa, Foreign Direct Investment, Institution, Governance Effectiveness, Control of Corruption, Regulatory Quality

Declaration

This is to certify that a Thesis prepared by Hawlet Fenta, entitled “**Institutions and Foreign Direct Investment Flows in Sub-Saharan Africa**” and submitted in a partial fulfillment of the requirements for the Degree of Master of Science in Economics (Development Economics) complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Examiner Abdurezack Hussein (PhD) Signature _____ Date _____

Examiner Solomon Kibret (PhD) Signature _____ Date _____

Supervisor Prof. Befekadu Degefe Signature _____ Date _____

Chair of Department of Graduate Program Coordinator

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List of Acronyms

FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GMM	Generalized Method of Moment
MNC	Multinational Company
OECD	Organization for Economic Cooperation and Development
OLI	Ownership, location, and Internalization advantage
SSA	Sub-Saharan Africa Countries
WB	World Bank
WDI	World Development Indicator
WGI	World Governance Indicator

CHAPTER ONE

1.1 INTRODUCTION

In many developing economies including Sub-Saharan African countries characterized by low per capita real income, high population growth rate, high rates of unemployment, dependence on the primary sector, dependence on exports of primary commodities, and a high level of poverty, and also a low level of domestic investment. Those problems are difficult to generate sufficient savings to provide the funds needed for domestic investment projects. By then savings-investment gap occurs. Those problems are unacceptable and have to change. To increase GDP growth, saving, and investment; these countries needed Foreign Direct Investment (FDI) as a significant source of capital inflows to fill the gap to sustain economic growth.

Capital accumulation is vital to increase the rate of economic growth (Levine, 1994). The traditional neoclassical growth models claim that differences in countries' capital accumulation lead to differences in per capita income. So, differences in capital accumulation are due to differences in countries' saving rates. Saving rate shows a level of investment that affects economic growth positively through increased output and growth; this causes high living standards in the long run (Solow, 1956).

FDI is an essential mechanism for creating jobs and injecting capital, also for the growth of productivity for the host country (Carol Newman, 2015). Globalization leads countries around the world to open their economies and to create conditions to attract FDI inflows. FDI has a great impact on the economic development process and it is one of the most secure elements of the investment flow of the host country in the SSA countries.

FDI can be a means of transportation of technological progress through techniques of production (Agnès Bénassy-Quéré, 2007). Hence, due to globalization, FDI is a key source of transfer of technology and skills, creates job opportunities, and also promoting capital formation and economic growth to the host countries. Under globalization, the world becoming a single market, hence countries' economies become more integrated and interconnected.

The perception of foreign direct investment (FDI) makes both developing and developed nations to competing for foreign investors (Custorella, 2017). The share of World FDI inflow raised by less than 1 percent for the past 10 years for instance, where it is only 3 percent in 2004; also, it failed by 13 percent from \$1.5 trillion in 2017 to \$1.3 trillion in 2018. FDI in developed countries and economies sharply declined while the developing countries of economies still stable rose by only 2 percent in 2017 (UNCTAD, 2019). The global FDI inflow to developing countries has been unevenly distributed.

FDI flows to least developing African countries increased by 22 percent to \$12 billion, but it is still 44 percent below the annual average of 2012 to 2016. Developing countries' inward FDI rate of return falls from 10 percent in 2012 to 8 percent in 2017; and also Africa falls from 12.3 percent in 2012 to 6.3 percent in 2017 (UNCTAD, 2019). The Sub-Saharan Africa region is one of the poorest regions in economic performance. The share of FDI in Sub-Saharan Africa is 1 percent from Global flows. FDI flows to SSA decreased by 10 percent in 2019 from 2018 (UNCTAD, 2019).

In Africa especially Sub-Saharan Africa, there is a low level of FDI inflows but this is not the same in some developing countries (WAKEYO, 2001). The level of FDI inflow of Africa mostly in domestic market and natural resource exploitation accounted for 5.5 percent of Africa's gross fixed capital formation in 2004 (WIR, 2005). Also, FDI flows to developing countries declined by 24 percent in 2009 also in general Africa recorded a decrease of 19 percent (UNCTAD, 2010). FDI inflows to Africa remained flat at \$54 billion (UNCTAD, 2015). In 2018 FDI flow to Africa increase by 11 percent after a decline in 2016 and 2017 to \$46 billion (UNCTAD, 2019). After a significant increase in 2018, FDI flows to Sub-Saharan Africa decreased by 10 percent in 2019 to \$32 billion (UNCTAD, 2020). Hence, the region of Sub-Saharan Africa has not been able to attract FDI on a large scale; this FDI flow fluctuation needs attention for study.

Furthermore, mainly the flows of FDI in the SSA region are still very low in absolute terms and focuses on some sectors and a small number of countries in an increasingly globalizing world for the past decades. The region still lags far behind in terms of attracting FDI compared with other developing countries. Despite the region is endowed with rich and relatively untapped natural resources; several efforts have been made in the past to increase FDI flows to the region such as

improving investment and business climate, better macroeconomic condition, greater economic liberalization, privatization, domestic and foreign market accesses, ensuring peace and stability and the likes but they have not had enough attraction of FDI flows and significant impact on the economic growth of the region. These indicate that efforts have been unsuccessful; they have not still lifted the underlying constraints on FDI to the region and failed to confront the challenges to the attraction of FDI to the region posed by the globalization process ((UNCTAD, 2010).

Therefore, in SSA countries attracting FDI is one of the priority conditions because it comes with technologies and innovations into the domestic economy. So, the determinants of FDI flow now are a great issue for researchers in SSA countries as it is one of the vital components of the flow of capital.

Due to the globalization process and the increasing roles of Multinational Corporation (MNCs) in economic development, many empirical researchers have been trying to take into account the effects of not only the external factors: market size indicators, infrastructural variables, openness, natural resource availability indicators, macroeconomic conditions but also the various institutional factors which are more dedicated to pointing out issues related to policy transparency, extended political and economic freedom, regulatory quality, conducive environment for business and investment, corruption, rule of law, political risk extra; which affect considerably the FDI flow in the host countries. Thus, investigating these fundamental factors is important to understand the FDI flow to the SSA countries, and help to take possible policy options in the future. So in this connection, this research thesis tries to focus on the major accesses to FDI flow to the region by giving more emphasis on major institutions in FDI flow to the region. Focusing on this issue only does not mean that other factors included in the theory of FDI are not considered; they will be scanned in the literature part and integrated with the empirical model.

1.2 Statement of Problem

Currently, foreign direct investment (FDI) flow is of critical importance to African economies. Our interest is to find a way and means of increasing the proportion of FDI flows to the Region. To this end we need to explore the determinants of FDI flows into Sub-Sahara Africa, measure the degree of its impact and explore institutional measures to improve the situation.

Hence, FDI is one of the core elements in the idea of economic globalization and it has got more attention as to what determines FDI inflow to Sub-Saharan Africa (SSA). FDI has known by many research experts as elements of capital inflows capable of prompting an economic expansion and transformation in developing economies seek to capture such investments to accelerate their development.

Though, empirical literature provides mixed results as to what factors are capable of attracting substantial foreign investments into developing countries (Esew & Yaroson, 2014). The substantial decline in FDI inflow registered in many countries in the SSA, which was due in part to political uncertainty, and unfavorable economic fundamentals or unfavorable destination (UNCTD, 2019). Hence; one of the challenges that the region SSA facing today is how to attract more FDI flows to the region.

Several determinations have been made in the past to boost FDI flows; such as institutions, market size indicators, macroeconomic stability indicators, natural resources and infrastructure, and others (Esew & Yaroson, 2014; Jabri & Brahim, 2015; Sabir et al., 2019). The determinants have not had much significant impact to attract more FDI flow to the region. As a result of the potential role of FDI in enhancing growth and economic transformation, many countries of the region seek to capture such investments to accelerate their development. Hence, this research project is motivated by the apparent lack of attention on the role of institutional factors on the FDI flows in this region.

Nowadays, the effect of the quality of institutions on foreign direct investment is a burning research topic. Different empirical works have been carried out on the effect of institutions on FDI in developing economies and countries using different econometric models and statistical tools. However, the sample countries, the sample periods, and the econometric methods of the

study that had been used in the study make the results different. Based on previous studies, most of them suggest there is a positive relationship between institutions and FDI. In some studies, their relationship does not always hold. However, these studies were indicated contradictory results in their conclusions on the effect of institutions on FDI inflow to the host country. Through, some of the results of the study show positive effects and the other result shows there is a negative effect of institutional quality on FDI inflow.

The study by Ahmad & Ahmed, 2014; Aziz, 2018; Chaib, B., & Siham, 2014; Esew & Yaroson, 2014; Jabri & Brahim, 2015; Sabir et al., 2019; Sabir & Khan, 2018 concluded that institutional quality has a positive and significant effect in attracting FDI inflow of a host country. Though study by Ameer et al., 2016; Nondo et al., 2016; Peres et al., 2018; Phung, 2017 concluded that institutional quality has not a significant effect on attracting the FDI inflow of a host country. Therefore, the effect of institutions on FDI is different across a time horizon in different areas and regions. The above all result contradictions show that there is room for further research in the subject matter.

Empirical literature's concerning the effect of institutions on FDI was conducted by using different econometric methods and models in different countries. Besides, the vast majority of the literature was conducted specifically in only one country like Ahmad & Ahmed, 2014; Chaib, B., & Siham, 2014; Esew & Yaroson, 2014. And, most of the study was studied using panel data basically from developed economies and countries (Aziz, 2018; Jabri & Brahim, 2015; Sabir & Khan, 2018). However, studies using panel data in Sub-Saharan African countries were limited and have received relatively little attention.

Mostly, the motivations of this study come from the following reasons. Firstly, the existence of ongoing issues concerning the effect of quality of institutions on FDI inflows and their functional relationship forms. Secondly, the relationship between FDI and institutions is to be a current subject matter in Sub-Saharan Africa countries. This study will fix the gap in the studies by investigating the effect of institutions on FDI in SSA.

1.3. Objectives of the study

1.3.1. General objective

The key objective of this study will be empirically determining the effect of Institutions on Foreign Direct Investment (FDI) in the sample countries of Sub-Saharan African (SSA) Countries.

1.3.2. Specific objectives

Given the above key objective, the study will have the following specific goals:

- Determine the effect of governance effectiveness, control of corruption, and regulatory quality on FDI in the sample of SSA countries.
- Further studies explain the trends of FDI; and, the summary statistics of of FDI flows, and institutions in the Sub-Sahara Africa region.

1.4. Research Questions

The questions to be answered in this paper are:

1. Do institutions affect FDI in the sample SSA countries?

1.5 Scope of the study

The time coverage is determined based on the availability of reliable data sources on the majority of the FDI and Institutions with other conventional variables. This study will try to cover the period from the year 2002 up to 2019; this is mainly due to the consistent availability of World Governance Indicator (WGI) data launched in the year 1996 but consistently continued from the year 2002 to the present. And it would attempt to employ annual data to analyze the effect of institutions on FDI during this period. Besides, the study will use long-term annual data to incorporate more observations to advance the strength and reliability of the results.

1.6 Significance of the study

The significance of studying the effect of institutions on foreign direct investment is because the institutional variables that seem to determine it are very important. FDI is a crucial variable for the overall development in Sub-Saharan Africa (SSA) countries. For an appropriate change in the economic development of countries, the government should know the underlying interaction between institutions and FDI. To use institutions as a tool for attracting FDI and to minimize the obstacles of foreign investors; the knowledge of factors affecting FDI is unquestionable. Therefore, studying the effect of institutions on foreign direct investment is important to understand how appropriate policy is necessary for attracting FDI in SSA.

1.7 Organization of the Study

The paper will be organized into five chapters. The first chapter deals with the introduction chapter discussed above, which contains the background, the statement of the problem, objective, research questions, significance, and scope of the study. The next chapter two is dedicated to the review of theoretical and empirical literature which is relevant to FDI flow. The third chapter deals with the methodology of the study. The fourth chapter will study data presentation and analysis. Finally, the last chapter five will give the conclusions and policy implications based on the findings of the study.

CHAPTER TWO

REVIEW OF THEORETICAL AND EMPIRICAL LITERATURE

This chapter has two parts, the first parts explore some theories on foreign direct investment and institutions, and the last part discusses some empirical studies that have previously been carried out on the subject.

2.1 Theoretical Literature Review

2.1.1 Definition and Concept Note of Foreign Direct Investment

In international economics, international factor movements are movements of labour, capital, and other factors of production between countries. International factor movements occur in three ways such as immigration/emigration, capital transfer through international borrowing and lending, and foreign direct investment. FDI is defined as investment in which the investor acquires a substantial controlling interest in a foreign firm or sets up a subsidiary in the foreign country.

Foreign direct investment (FDI) is defined as a capital movement or an investment engaging in a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the foreign direct investor. FDI implies that the investor applies a significant degree of influence on the management of the enterprise resident in the other economy for the sake of the strategic long-term relationship. The investor or a controlled subsidiary often receives direct input of technology, managerial skills, and assets either tangible or intangible. FDI may be undertaken by an individual, a group, public or private enterprise, or either incorporated or unincorporated enterprise other social organization (WORLD INVESTMENT REPORT, 2012).

FDI flow consists of capital received from an FDI enterprise by a foreign direct investor; or capital provided by a foreign direct investor to an FDI enterprise either through direct or other enterprises. Also, it can be defined as an investment made by an enterprise or an entity based in one country to an enterprise or entity based in another country.

FDI occurs when an investor based in one country or the home country obtains assets in another country or the host country to manage that obtained assets. Direct investment involves both the initial transaction and all subsequent capital transactions between investors and enterprises, and among affiliated enterprises, both incorporated and unincorporated. FDI has three categories: equity capital reinvested earnings and intra-company loans. Equity capital is the value of shares of an enterprise in a host country purchased by the foreign direct investor. The direct investor's share of earnings not distributed as dividends or remitted to them by affiliates and such retained profits are reinvested, this is concept is called reinvested earnings. Intra-company loans or debt refers to short or long-term borrowing and lending of funds between direct investors and the affiliate.

2.1.2 Determinants of Foreign Direct Investment

Foreign direct investment is determined by four motives. In general, the motivation for the FDI is to make the enterprises more competitive and profitable in the global markets.

2.1.2.1 Resource Seeking Foreign Direct Investment

FDI which seeking and acquiring abundant and specified natural resources such as raw materials, skilled and unskilled labor force, also minerals at a higher quality with a lower cost than that of the home country. Most outputs that are produced by the companies, resource seeker companies, are exported to developing countries. Resource seeking FDI has three different types; the first one is physical resource seeker for example industrial minerals, agricultural products, metals, mineral fuels. The second is supply resource seeker who seeks skilled or unskilled labor force at low real labor cost. The third type is resource seeker who seeks management or marketing expertise, technological capability, also organizational skills (Dunning & Lundan, 2008).

2.1.2.2 Market seeking Foreign Direct Investment

Market seeking Foreign Direct Investment refers to FDI to identify, exploit, and gain access to new local and regional markets for the company's products. To attract market seeking investment, the host countries condition such as market size, growth of the market and per capita income has to be good. There are four reasons which could encourage the companies to engage

market seeking investment or FDI. The first reason is the company's main suppliers or customers have set up foreign-producing facilities and to retain their business, they need to follow them overseas. The second is their products have to be adapted to local needs and tastes, to cultural values, to indigenous resources and capabilities. The third is that the company's investment activities' costs of production and transaction are less than supplying and transporting it from the distance. Firms locate near the main center of the consumption; it involves easy production expansion and thus yields economies of scale in their production. It is preferably similar taste among consumers. The fourth is companies consider it necessary to engage in the global production and marketing strategy to be a leading market served by its competitors (Dunning & Lundan, 2008).

2.1.2.3 Efficiency Seeking Foreign Direct Investment

Efficiency seeking Foreign Direct Investment is a kind of FDI that looking for investment in different countries to gain economies of scale in the presence of risk diversification from the common governance of geographically dispersed activities. Generally, efficiency seekers will experience diversified and large MNEs producing fairly traded products and engaging in processes of internationally accepted production activities. Efficiency Seeking FDI has two kinds, the first one is it is designed to yield advantage of availability differences and relative cost of traditional factor endowments in different countries. And the second kind is efficiency-seeking FDI takes place in countries with broadly comparable income levels and economic structures and is designed to yield advantage of the economies of scale and scope, and differences in supply capabilities and consumer tastes (Dunning & Lundan, 2008).

2.1.2.4 Strategic Asset or Capabilities Seeking Foreign Direct Investment

Strategic Asset or Capabilities Seeking Foreign Direct Investment is a kind of FDI that needs to acquire and purchase assets or the existing firms that would help companies to pursue strategic operations, keep ownership-specific advantages, and strengthen their competitiveness in the global market (Dunning & Lundan, 2008). Its activity may include pre-empting market entrance by and the acquisition by local firms by competitors, and acquisition of local capabilities, key local firms, knowledge of human capital, and market. It wishes to increase the ownership

benefits of diversified activities and capabilities, and similar activities and capabilities in diverse economic and potential environments.

2.1.3 Theories of Foreign Direct Investment

Foreign direct investment theories are classified into two economic perspectives microeconomic FDI theories and Macroeconomic FDI theories.

2.1.3.1 Microeconomics Foreign Direct Investment Theories

The microeconomics FDI theories are firm-specific and relate to ownership and internalization advantages. Or it examines FDI motivations from the investor's viewpoint in making a decision it is similar to a firm or industry perception. It analyses the consequence of FDI to home and host countries and investors. The consequences arising from their production lead to a growth in stocks and capital flows, employment, and trade (Lipsey, 2002). Also, microeconomic FDI theories attempt to explain why multinational enterprises (MNEs) choose to locate their subsidiaries in foreign countries where they do, and why investors specifically seek to penetrate those locations (Makoni, 2015).

2.1.3.1.1 The Product Life Cycle Theory of Vernon

The production life cycle theory was developed by Vernon in 1966 and its principles are technological innovation and market expansion. He argued that a new product is first produced continuously and sold in home market until the home market is saturated. According to his theory, firms go through four stages of the product life cycle of innovation, growth, maturity, and decline. At the first stage new products are invented, produced, and then sold in the home market; and export the surplus. If the demand for the product increases, production increases, new markets are penetrated and the product will be exported to other countries. This stage is the transition from growth to maturity.

At the maturity stage, the competitors over firms raise also the product become standardized and the product originator starts to open subsidiaries in a foreign market to meet growing demand where the cost of production is lower. Then investment or FDI increases at the stage of maturity where the product life cycle reaches the maturity stage. Then, the product is exported to the

country also to the innovator one this is called the decline stage. Hence, the product life cycle starts again with the innovation of the product (Makoni, 2015).

2.1.3.1.2 Internalization Theory of FDI

Some transactions should be internalized which means that those transactions have to carry out within a firm rather than between firms, to reduce transaction costs and raise the profit stream of a firm. This could be a reason why multinational enterprises exist. The reason for internalization and multinational enterprises appears is the occurrence of market imperfection that led to divergence from perfect competition in the final product market (Hymer 1976). FDI is a firm-level strategy decision not a capital-market financial decision.

Internalization theory tries to answer the question ‘why cross-border transactions of intermediate products are determined by their firm hierarchy rather than market forces?’ And, the theory can predict the situations in which firms choose to internalize foreign markets. The main idea of this theory is that, given the factor of endowments, the extent and content of MNE activity are positively determined by the organizing costs of the cross-border market of intermediate products. When those products are internalized within hierarchies, firms enable to own and control value-adding activities outside their national boundaries. This theory is achieved by coordinating diverse activities within a single firm (Dunning & Lundan, 2008).

2.1.3.1.3 The Eclectic Paradigm

The eclectic theory gives explanation how multinational enterprises decide to invest abroad. The theory developed by Dunning and the theory contributed to the determinants of FDI. It is a mix of three different advantages of foreign direct investment such as ownership advantage as O, location advantage as L, and internalization advantage as I (Dunning & Lundan, 2008).

Operating transnational companies (TNCs) has many tasks at the foreign country for example knowledge failure about local market conditions; and additional costs than at the domestic like operating costs, legal, cultural, and other costs. Hence, companies should have some advantages that could offset these tasks.

Hence, ownership advantages are specific advantages of the companies that give power to a monopoly over its specific advantages, and using those leads to high marginal profit and low marginal cost than other their competitors. This could be a product or a production process to which other firms do not have access, such as patent, blueprint, or trade secret. But the advantage could also be as intangible as a trademark or a reputation for quality. Specific advantages have three types; the first one is monopoly advantage means the privileged access to market ownership of trademarks, patents, natural limited resources. The second one is that technology advantage or knowledge in all forms of innovation activity. The third one is economies of large size for instance economies of scale and scope, economies of learning, access to financial capital (Denisia, 2010).

Location advantages are country specific advantages of each country and it is a key to determine the host country for the TNCs activity. Those specific advantages are social, political, and economic advantages for the companies. Social advantages include the distance between the home and host country, diversity of culture, attitudes to strangers. Political advantages also include political stability, government policies that have effects on FDI flows. And, the economic advantages include adequate infrastructure, telecommunications, low cost and accessibility of natural resources, market size, macroeconomic stability, and factors of production. But more intangible factors, such as customer access, can also be important.

Thus, this sub-paradigm asserts that the more the immobile, natural or created endowments favor a presence in a foreign location, the more firms will choose to augment or exploit their own-specific advantages through international production. The foreign market must offer a location advantage to MNCs which makes it more profitable to produce in the foreign country than to produce at home and export to foreign market.

Internalization condition is the companies' ability to internalize activities to protect their right over both tangible and intangible assets of the company. Hence, internalization of the advantages is higher when the company is more willing to engage in foreign production rather than offering this right under other companies (Denisia, 2010).

It is also explaining the activity of firms outside their national boundaries, which related to the way the firms organised the generation and use of the resources and capabilities within their jurisdiction and those they could access in different locations. In other words, it explains fully the extent and pattern of the foreign value added activities of firms. A firm can have the advantage of a proprietary product or production process, and tariffs and transport costs advantage to produce abroad rather than to export, but it is still not certain that a company should set up a foreign subsidiary. One fairly simple alternative would be to license a foreign firm to produce the product or use the production process. One can ask why not just sell the blueprints to a foreign firm other than go through the costly and difficult process of setting up a foreign production facility. Because the process is better exploited internally within the firm jurisdiction rather than at arm's length through markets.

In general, the Dunning's OLI paradigm has remained the dominant analytical framework for accommodating a variety of operationally testable economic proposals of the determinants of foreign direct investment.

2.1.3.2 Macroeconomics Foreign Direct Investment Theories

The macroeconomics foreign direct investment theories are country-specific and relate to trade and international economics. Or it is situations that determine the inflow of FDI in host countries. The theory explains FDI as a form of capital flow from home countries to host countries or across national boundaries and it is reported in the capital account of the countries. Due to this, there is incensement in capital stock flow, the value and the owner of the home-country investment, also corporations (Baldwin et al., 2004). The macroeconomic factors that affect the ability to attract FDI to the host country include market size, GDP, economic growth rate, infrastructure, natural resources, and institutions.

2.1.3.2.1 Capital Market Theory

The capital market theory is one of the oldest theories of foreign direct investment and it tries to explain FDI based on strength of the currency of the home and host countries. Or it's sometimes called currency area theory. Generally; due to capital market imperfection in both home and host countries, foreign investment can rise. According to Aliber 1970, countries with weak currencies

have high ability to attract FDI to take benefits in differences in the market capitalization rate than countries with strong currencies. The home country's multinational companies with hard currency have a borrowing advantage because they could borrow at a lower interest rate as compared to the host country's companies this is due to the reason portfolio investors manage the foreign aspect of MNCs of a home country's. Due to borrowing advantage, the MNCs can access the cheaper sources of capital for their production activities. In general, according to this theory, FDI is determined by interest rate.

2.1.3.2.2 Gravity Approach to Foreign Direct Investment

The gravity approach to foreign direct investment explains the push and pulls factors of FDI. It assumes FDI flows would be high between two countries when there is closer in terms of geographical, economic, and some trade considerations. This gravity model identifies the factors of FDI flows, in the form of distance-related, market-related, and endowment-related. Distance-related factors include the geographical distance between the countries. More the closer the geographically the lower transportation costs, and also, if there is mutuality in culture between countries would raise the profit of the production of the firms (Popovici & Călin, 2014). The market-related factors include the size of the population as a proxy of the size of a host country, market volume, GDP as an indicator of growth, the level of development as a proxy of degree of production. The endowment related includes natural resources, innovation and technology, shared language and cultures, labor cost as a proxy of wage, GDP per capita, and skilled employee as a proxy of general development.

2.1.3.2.3 Theory of Institutional Foreign Direct Investment Fitness

Institutional foreign direct investment fitness theory was developed by Wilhems and Witter (1998). According to this theory, FDI Fitness Institutions are four pillars as part of the pyramid those are government, markets, education, and socio-cultural factors. Socio-cultural factors are rested at the base of the pyramid and it plays a major role in the attraction of FDI because of the perceived proximity of culture by foreign investors. Due to cultural proximity, the East African region was observed as one of the suitable FDI locations by investors (Karau & Mburu, 2016). The second pillar is education factors; Education can bring educated human capital and have an

impact on the productivity and efficiency of FDI. The next one is marketing it incorporates financial and economic aspects of FDI flows. The last and the top of the pyramid is the role of government on FDI flows. Government fitness is responsible for implementing regulations to manage the other three institutions and also market fitness. The key factor of governance is political stability. Hence, all the above pillars are interrelated to each other.

According to this theory, institutions play a core role in a country's competitive advantage in the overall FDI market. The country has higher institutional fitness when the institutions are well functioning, accountable and transparent, reliable, and can be predictable. The higher the institutional FDI fitness experience country has the higher FDI inflows as compared to the lower FDI fitness country. The term foreign direct investment fitness shows that the ability of a country to attract, absorb, and retain FDI through responding quickly to opportunities and dangers, flexibility, and creativity condition in which a country could survive against competitors. This theory tries to explain why foreign direct investment flow is distributed unevenly across countries from out of proportion to natural resources.

2.1.3.2.4 Dynamic Macroeconomic Foreign Direct Investment Theory

Dynamic Macroeconomic Foreign Direct Investment Theory explains FDI as it is a long-term and time-dependent investment function. The host country's macroeconomic situation highly depends on the time of investment. Hence, macroeconomic variable includes the gross domestic product (GDP), real exchange rate, risk perception, and degree of openness. Movements of the exchange rate would change relative real labor costs, and it affects FDI (Cushman, 1985). Under uncertainty (currency risk), the effect of exchange rate on investment is within an actual choice; FDI consists of a sequence of decisions to invest or to wait. For instance, increased uncertainty such as exchange rate volatility increases the value of the option to wait and vice versa (Dunning & Lundan, 2008). Or, FDI flow rises as exchange rate volatility increases as there is uncertainty due to higher volatility.

2.1.4 Benefits and Costs of Foreign Direct Investment

Since the recent times, nearly all literatures and policies have favored the advantage of FDI in all aspects of economic development in host country. However, there is an opposing view to the role of FDI in developing economies. The buoyancy of FDI argued that FDI benefits the host country, for instance by creating employment opportunities and bringing new technologies. On the contrary, the other group squabbles the adverse effects of FDI prevail over its benefits. Those favor to FDI argue that economic growth depends on the rate of investment which in turn largely depends on savings. However, gross domestic savings are too low in the least developed countries (LDCs).

Foreign direct investment is an alternative source of filling the gap between savings and the required investment. Foreign firms bring not only financial capital but also managerial techniques as well as, entrepreneurial and technological skills that lack in LDCs and these skills can be transferred to domestic firms through different channels. The government's budget deficits can also be filled by profit-tax may be collected from multinational companies. Besides, foreign currency that can be obtained from export and net public foreign aid falls short of the required amount by LDCs; hence FDI can help to fill this gap by reducing part or the entire difficult in the balance-of-payments. Moreover, the trans-national companies' manufacturing products that can be exported are able to generate net positive export earnings. For can also play important role by creating employment opportunities and by integrating the host-country's economy in to the world economy (Todaro, 1992, OECD, 2002).

Opposing to the above argument, for can have cost to LDCs. Although initial investment of foreign firms improves the current and the capital account of the host country, in the long run, substantial import of intermediate and capital goods, repatriation of profit, interest, royalties and management fees may harmfully affect the foreign exchange position of the host country. Foreign firms may also fail to reinvest the profit they generate in the host country; hamper the growth of domestic enterprises and domestic investment by importing the input and intermediate product from their subsidiaries in other countries. FDI might also inhibit the development of indigenous skills as the result of multinational companies' dominance over local enterprises.

Also, governments often enter in to exclusive agreements with foreign firms and provide tax holidays, tariff protections, and investment allowances. (OECD, 2002, Todaro, 1992).

2.1.5 Institutions In International Business

The contemporary international business sees the multinational enterprises as a creator, accessor and transferor of a bundle of resources and competences, which typically includes financial capital as well as technology, consisting of both hard technologies (for example R&D capacity), and soft technology (for example organizational regimes). While most of the literature related to the costs and benefits of technology transfer has been concerned with hard technology, more recently scholars have begun to appreciate that no less important is the willingness and ability of MNEs to transfer or adapt soft technology and, in particular, organizational structures and work practices.

The institutional elements brought by the MNE may affect the host country in ways that can be beneficial or detrimental, but without explicitly identifying and evaluating this component of the bundle transferred by the MNE, it is unlikely that much attention would be paid to such effects. Consequently, institutional dimension of MNE activity will not only lead to an improved analysis of the MNE and also better enable us to understand how MNE activity influences national-level institutions, and by doing so, the economic and social goals of countries. Throughout this volume, in the course of reviewing the literature, these identified a range of empirical results that point to the relevance of institutional factors.

These findings have been accompanied by considerable advances in institutional theory, most noticeably within the fields of economics, management and sociology. At a micro level, studies examining the choice of entry mode and location have employed an institutional perspective emphasizing isomorphism. At a macro level, the economics literature has revealed a great deal about the importance of institutions for the ability of countries to attract FDI, and to derive a sustained economic benefit from it. In order to better understand the determinants of MNE activity as well as its effects, we need to be able to simultaneously consider the institutional influences inside the firm, as well as those between the firm and the external environment in which it operates.

While the international business literature has dealt with institutional issues in the past, and is increasingly doing so now, the fact that the discussion has drawn on very different sources has prevented integration of the micro-level or firm-level analysis with the macro-level or national-level analysis. While this approach has allowed some progress to be made in understanding the determinants of MNE behavior, and it has not been as successful in illuminating the effects of MNE activity. A unified framework that combines micro-level and macro-level analyses, and explicitly considers the interdependence between the two, would help to bring about a better analysis both of the behavior of the MNE, and of its effects on the home and host countries. On account of its holistic nature, the OLI paradigm is well-suited for this purpose.

Generally, institutional analysis in the international business, or in the business and economic literature; has paid very little attention to the motivations behind the strategic behavior of firms. Most research has tended to focus on outcomes for the firm, rather than the inputs, or the context of decision making as it relates to the norms and values both internal and external to the firm. Research on the goals and determinants of economic growth at the national level is increasingly focusing on the content and role of informal institutions, as an important complement to that of formal institutions in affecting both the physical and human environment.

2.1.6 Why Focus On Institutions?

Institutions become so much more important over the past two or three decades; this is due to the reasons which lay both in our changing conception of the multinational enterprise (MNE) as an organizational entity, as well in the changes in the global economy that have dramatically changed the economic landscape. MNE defined as a coordinated system of domestic and cross-border value-added activities. The content and structure of such a system is thought to be determined by the hierarchical costs of production, the market costs of exchange, and the interdependence of production and exchange relations.

Moreover, transaction costs can be used to explain these interdependencies and boundaries in a static framework; hence in order to explain dynamic growth some reference to path-dependent resources and firm-specific capabilities is necessary. Besides, the institutional structures created, accessed and deployed by the firm affect its choice of governance, of both productive and

exchange activities; and that in this sense, transaction costs are firm specific. The internalisation factor has been more institutionally orientated, as it relates to the costs and benefits of alternative modes of governance.

Most economic theory of the determinants of international business activity has been asset based, whether these assets were owned or accessed by the enterprises. However, in the past two or three decades, the composition and significance of competitiveness enhancing assets has changed, as the tangible resources and intangible capabilities available to firms have become more knowledge and information intensive (Dunning, 2004). At the same time, their geographic sourcing and deployment have become more widely spread. This had led to an increased importance of the MNE as a fashioner and organizer of economic activity, and consequently the motives, values and norms that shape and condition MNE decision making.

Much of economic value today is a return to the way in which O-specific advantages of firms are created and deployed, rather than a return to capital in the sense of a return to the owners of capital equipment and property. The downsizing of the physical assets owned by firms, including productive assets and real estate, and the corresponding increase in contractual outsourcing have changed the boundaries of the firm. Only those activities in which the firm possesses unique skills and capabilities are likely to be internalized. For other value-added and transactional activities, the increasing modularization of design, and the commoditization of the modular components, have led, and are leading, to a dramatic increase in the number of firms capable of providing such intermediate inputs at low cost and according to high specifications. Even activities such as R&D, which are critical to the knowledge generation of the firm, are beginning to be subject to modularization and outsourcing, at least in the more routine areas of research.

These changes in the nature of the MNE have themselves been driven by developments in the global economic and political landscape. A dramatic reduction in communication and transportation costs, combined with the increasing interconnectedness of cross-border markets, has resulted in an increase in the number of locations where value-added activities can take place. This presents more options to MNEs both to exploit locationally bound 'sticky' assets wherever they may be sited, and to engage in cost reducing footloose investment to produce goods and services that do not draw on locationally bound resources.

Institutions at the national level affect the value-adding opportunities open to firms, including those associated with agglomerative or clustering economies. While for some kinds of activities, such as simple parts assembly, MNEs may be able to choose among multiple locations, for knowledge-intensive activities the number of alternative sites may be small or equal to one. This makes it imperative to understand both how macro-level or national-level institutions might affect the value-adding opportunities of MNEs, and how the ideas and actions of these firms might, over time, affect the content and significance of these institutions.

2.1.7 Definitions of Institutions

Douglass North (2005) defines institutions as formal rules (such as constitutions, laws and regulations) and informal constraints (such as norms of behaviour, conventions and self-imposed codes of conduct). Institutional systems are complete when both formal and informal institutions take into account. The study of the formal institutions believed to influence economic activity and growth at the national level has thrown up some curious puzzles. The broadly convergent economic performance of developed economies, which reflect a wide range of incentive structures and enforcement mechanisms, would seem to suggest that many different institutional configurations can produce broadly similar results. Alternatively, it might be that particular institutions are required for the efficient production and socially responsible of particular goods and services, while others simply represent economically inconsequential variety. At the same time, the gap in the economic performance of many developed and developing countries have persisted through decades with some notable exceptions.

Since the formal institutions underpinning modern economies, including the structure of the legal system, the design of financial institutions, and the system of intellectual property rights, has been copied in many developing countries. Countries that perform poorly do so because the informal institutions including values, norms and belief systems do not support economic activity in a manner that is compatible with global capitalism. Institutions and their enforcement mechanisms set the 'rules of the game', which organisations, in pursuit of their own learning and resource allocative goals, have to follow.

Institutional change is a path-dependent process, and there are considerable transaction costs in changing the existing structure, as both individuals and organisations tend to embrace changes in their environment with great caution. Furthermore, any set of institutions is always a combination of elements that both promote and hinder the upgrading of existing resources and capabilities. Consequently, even in countries where efficient institutions tend to outnumber inefficient ones, institutional change is never guaranteed to produce the kinds of results it is intended to do, this is due to non-ergodic nature of much of the contemporary world which means that uncertainty is extremely difficult to measure or deal with, let alone overcome, by reference to past events, information and intentions. This poses particular challenges for countries with predominantly undeveloped institutions, as institutional change is even less likely to bring about the intended results.

The fundamental economic condition of scarcity leads to competition, which acts as an incentive to innovation and learning, and to devising better institutions. But this does not account for all of institutional change, and according to North, the primary stumbling blocks lie in two directions; the resistance of vested and dominant interests to change, and the informal institutions, especially social mores and traditions. Such a ‘bottom-up’ theory of institutional change implies that anything that is likely to influence individual decision making, such as education and belief systems, is also likely to affect the choice of institutions, and consequently the path of economic growth (North, 2005; Nelson, 2006).

Institutions are, by their nature, restrictive in that they close off courses of action that otherwise would be available, by making them excessively costly, or reducing their value. At the same time, institutions do not simply impose constraints on the actions of firms: they may also affect the cognition of managers, and condition the possible behavioral paths that an MNE might pursue. Importantly, in some circumstances, MNEs may have the ability to alter the formal or informal incentive structures that affect their actions.

2.1.8 Measurements of Institutions

Different organizations measure institutions with different methodologies for different countries through the proxy of other variables. Pieces of literature measure qualities of the institution from

different sources such as governance indicators, freedom index, and political freedom index. Among those, the most popular and widely used today are the Worldwide Governance Indicators (WGIs) produced by the World Bank lessening from the work of Kaufmann et al., 2009. Governance can be defined as a tradition and institution by which authority in a country is exercised. Governance indicators measure the process by which those in authority are selected, monitored, and replaced; the capacity of the government to effectively formulate and implement sound policies and provide public services; and the respect of citizens and the state for the institutions that govern economic and social interactions among them (North, 1990).

With governance explicit reference to the institution (Zhuang et al., 2010), in this study, we will use measures some of the governance indicators as a proxy of institutions due to collinearity problem. According to World Bank's, worldwide governance indicators measures six key dimensions of governance: the one is voice and accountability (VA) measured by the perceptions of the extent to which citizens of a country can participate in selecting their government, in addition to freedom of association, expression, and media. The second indicator is political stability and absence of violence/ terrorism (PV), it measured by the perceptions of the likelihood in which the government will be destabilized by unconstitutional or violent means and also terrorism means. The third one is government effectiveness (GE), measured by the perceptions of the quality of public services, civil service and degree of independence from political pressures, the quality policy formulation and implementation; and the responsibility of the government's commitment to the policies.

The fourth indicator is the regulatory quality (RQ), measured by the perceptions of the ability of the government to provide sound policies and regulations that enable and promote private sector development. And the fifth indicators is called rule of law (RL), it is measured by the perception of the extent to which agents have confidence in and abide by the rules of society, and the quality of property rights, contract enforcement, the police, the courts, and the prospect of crime and violence. To the last, the sixth indicator is control of corruption (CC), which is measured by the perception of the extent to which public power is exercised for private gain. It includes petty and grand forms of corruption, and also capture by elites and private interests of the state (Kaufmann

et al., 2009). The measurements are near zero and ranging from –2.5 to 2.5, with larger positive values indicating better institutional quality.

2.1.9 Institutions and Foreign Direct Investment

Most of the previous literatures have, to a large extent based on the traditional theoretical frameworks for their empirical study to characterize the main factors that determine the flows of For, yet they do not explain the whole picture of uneven international distribution of FDI among countries. The quality of the institution of the host countries viewed as a crucial location advantage, which has also got much attention recently as one of the major determinants of FDI in the context of developing countries (Abdul Hayee Scholar et al., 2016; Asiedu, 2002; Law Siong Hook et al., 2013; Siddica & Nur Angkur, 2017). Good institutions, which secure property rights, guarantee the political stability and weaken the corruption, promote a good investment climate.

The interest in the links between institutions and FDI in the literatures is based on the insight of new institutional economics, which has been as a dominant school of thought since 1960, with its emphasis on unbounded rationality, property right, lack of information and other factors that affect transaction costs (North, 1990). New Institutional Economics (NIE) disagree with the Neoclassical assumption of 'allocationally' neutral effect for all type of institutions (legal, political, monetary and others) during transaction or any economic activities; and the unbounded perfect individual rationality (zero transaction cost assumptions). NIE argues that economic development is not simply the result of amassing economic resources in the form of physical and human capital, but it is also a matter of "institution building" that reduces information imperfections, maximises economic incentives and reduces transaction costs.

In the economics and development literature, the term institution is one of the areas of interest recent researchers after Matthews, 1986 and North, 1990 works with a different meaning. According to North, 1990, institutions are humanly devised instruments in which human interaction takes place and is shaped, and includes human-invented constraints consisting of a structure of human exchange incentives in social, political, and economic issues. Institutions reduce uncertainty by providing efficient structure to human interaction. Institutions could be either formal or informal constraints. The formal one grows within a short period includes

property rights, rule of law, constitutions. While, the informal one needs a lot of time to developed and includes codes of conduct, customs, taboos, culture, sanctions, and traditions. Institutional constraints refer to what is prohibited and permitted in certain activities. Both institutional constraints in particular organizations have come into existence because of incentives to maximize its profit and returns of the activities that the organization undertakes.

Good institutions affect the activities of economic organizations by reducing the different costs of doing business such as manufacturing, production, and transaction costs by doing so their profit and return would increase. Also, good institutions promote a good investment environment and governance effectiveness, weekend corruption, increases regulatory quality, secure property rights, guarantee political stability.

Though poor institution affects the market negatively and makes the organization to take up more time and resources for doing business activities. For instance; when contract enforcement is difficult and the property rights are weakly protected, there is a high-risk premium which leads to slower economic activity in the economy of the host country. On the other way when the property rights are strongly protected, there is a low-risk premium which creates a good and risk-free environment in the host country. Hence, the good institution is a reason for better foreign direct investment utilization (North, 1990).

Foreign direct investment has different doing business costs and those costs make enterprises reluctant to enter foreign markets except it has low levels of risk and uncertainty. Countries that plan to attract more foreign investment should therefore provide an appropriate institutional environment in terms of property rights, rule of law, political stability, or efficiency of the market (Chaib, B., & Siham, 2014; Globerman & Shapiro, 2003). Quality of institution has a role on those this could lead to prospective economic growth and make a country more attractive to foreign investors (Acemoglu et al., 2005; Rodrik et al., 2002). Generally, a better institutional environment is characterized by a high level of private investment and FDI inflows (IMF, 2004). Institutional reforms are key for countries with limited fiscal space and a reliance on foreign investment to enhance their prospective growth.

The effect of institutions on foreign investment can be related to two different channels (Daude & Stein, 2007). The first one is when there is bad institutional quality it acts like a tax, this causes the increasing cost of doing business or investment. And the second one is, bad institutional quality, for instance, imperfect enforcement of contracts may create uncertainty in the market regarding future profits and returns hence this has a negative effect on FDI. Additionally, according to Buchanan et al., 2011, poor institutional quality can also increase the volatility of FDI and uncertainty associated with all types of investment like FDI which can have an adverse impact on economic growth. Mostly, FDI flows at a large scale to countries with better quality of institutions; though countries with worse quality of institutions could impede their FDI.

2.2 Empirical Literature Review

Numerous empirical works of literature conducted before about the effects of institutions on foreign direct investment (FDI). From these studies, some of it determined the positive effect of institutions on FDI. On the other hand, the left of them determined the negative effect of institutions on FDI. This section will discuss these types of studies from different regions and countries, time, also the methodology of the studies.

2.2.1. Studies that found the Positive Effects of Institutions on Foreign Direct Investment

The study Jabri & Brahim, 2015 investigated the effects of macroeconomic determinants and institutional indicators of FDI inflows by using panel co-integration techniques in the Middle East and North Africa (MENA) over the period 1984-2011. By considering the hypothesis of structural change and economic interdependence, they investigate there is a positive long-run effect of institutional indicators like government stability, rule of law, investment profile, internal and external conflict on attracting FDI inflows in the MENA region. Also, other macroeconomic determinants like growth rate, openness, exchange rate, and economic instability have a positive effect on attracting FDI inflow in that region.

The study Buchanan et al., 2011 investigated the impact of institutional quality on foreign direct investment (FDI) levels and volatility over the period 1996 to 2006 for 164 countries using panel regression such as OLS regression, fixed and random effect. They found that institutional quality has a positive and significant effect on FDI and they concluded that a one standard deviation change in institutional quality improves FDI by a factor of 1.69. They saw the trend of FDI on a regional basis; it has continued an upward trend in the Middle East and North Africa and Sub-Saharan regions. According to their study, Sub-Saharan Africa's FDI inflow has risen strongly and the region continues to rank poorly in terms of investor preferences.

Sabir & Khan, 2018 investigated the impact of macroeconomic variables, democratic institutions, and human capital on FDI inflow in Asian countries over the period from 1981 to 2015. The analysis part of the study was examined by fixed-effect technique and system generalized method of moment technique by using panel data of 18 East Asia and Pacific countries and South Asian countries. The result of the study shows human capital and political

stability have positively and significantly affected FDI inflow over all those Asian countries. Specifically in East Asia and Pacific countries; democratic institution, inflation and GDP per capita has a strong effect on FDI inflow, while in South Asian countries trade openness, the average year of primary schooling and average year of secondary schooling has a strong effect on FDI inflow. In general, the study examined that due to high macroeconomic stability there is greater FDI spillover in East Asia and Pacific countries than South Asian countries.

The study Sabir et al., 2019 investigated the impact of institutional quality on FDI inflows in low, lower-middle, upper-middle, and high-income countries over the period from 1996 to 2016. The analysis part of the study was examined by system generalized method of moments (GMM) using panel data and the result of the study shows institutional quality determines FDI positively in all regions. The study uses governance indicators as a measure of institutional quality; those are control of corruption, government effectiveness, political stability, voice and accountability, rule of law, and regulatory quality. Hence, the result of the study shows the coefficient of the magnitude of variables of institutional quality differs across the group of countries. In developed countries, it has a greater effect on FDI than in developing countries. In developed countries, infrastructure and trade openness as a percentage of GDP affects FDI positively while inflation, agricultural value-added as a percentage of GDP, and GDP per capita affects FDI negatively. Besides in developing countries; GDP per capita, infrastructure, trade openness as a percentage of GDP, and agricultural value-added as a percentage of GDP affect FDI positively while inflation does not.

The study (Aziz, 2018) investigated the impact of institutional quality on FDI in 16 Arab countries over the period from 1984 to 2012. The study analyzed using system GMM estimation on panel data and the study uses economic freedom, international country risk, and ease of doing business as institutional variables. The regression result of the study shows that institutional variables have a positive and significant impact on FDI inflows in Arab economies.

The study of (Esew & Yaroson, 2014) also investigated the effect of institutional quality on attracting FDI flows to Nigeria from the period 1980 to 2011. Using Vector Error-Correcting Method (VECM), the result from the empirical analysis shows trade openness, human capital, and institutional indicators like corruption and political stability are the major determinants of

FDI inflow. The result also shows macroeconomic stability in terms of the less volatile inflation rate, efficient financial market, and less corrupt institutions, and also political stability has a positive effect on FDI inflows in Nigeria. Moreover, the quality of institutions is significantly related to FDI inflows.

Ahmad & Ahmed, 2014 investigated "do institutions matter to attract FDI inflow in Pakistan?" over the period from 1980 to 2010. The analysis part of the study was analysed by autoregressive distributive lag (ARDL) co-integration technique and the result of the study shows institution quality does matter to determine FDI inflow both in the long run and short run in Pakistan. Hence, they examined institutional quality and trade openness has a significant effect to attract FDI inflow in Pakistan's economy. Similarly, in Mahmood et al., 2019 Using the ARDL approach on annual time series data over the period 1981-2014, they suggest that institutional stability and FDI co-integrated positively in the long run in Canada by making institutional stability as exogenous variable and FDI as an endogenous variable.

The study (Chaib, B., & Siham, 2014) investigated the impact of institutional quality on FDI in Algeria over the period from 1995 to 2011. The analysis part of the study was analysed by vector error correction model (VECM) and Johansen co-integration test, and they use voice and accountability (VA), and economic freedom (EIQ) as institutional variables. The result of the study shows that both VA and EIQ have a positive effect on FDI in the long run in Algeria's economy. Governance effectiveness affects FDI inflow positively in the short run. It could be concluded that the improvement of economic freedom and voice and accountability in Algeria can be considered a fruitful plan for providing good investment climate and attracting more FDI inflows in the long term

Seyoum, 2009, investigated the effect of formal institutions on FDI inflow in 125 countries. The analysis part of the study uses OLS regression and Logistic regression, and the result of the study shows a strong formal institution positively affects FDI flows in the host country; as a strong institution reduces the cost of production and distribution, and allows private agents to benefit from the investment. Also in the study, FDI is largely affected by the institutional distance between the host and the home country; or the less institutional distance between them the more

FDI for the host country. Also, market size, trade orientation, or economic growth has a strong determinant of FDI.

The study (Karau & Mburu, 2016) investigated the institutional, governance, and economic factors affecting foreign direct investment inflows in East Africa. According to the study East Africa exhibited the lowest in-flow of FDI when compared to other African Regions, despite the substantial policy and structural changes as well as economic integration that had been taking place in the East Africa during the study period. In this study non-experimental panel data analysis was conducted for eight Eastern African Countries during the period 1996-2010. A one-way fixed effects least squares dummy variable model was estimated. The study found that control of corruption, political stability, rule of law, and infrastructure among others significantly influenced FDI inflows to East Africa. The study advised that East African governments needed to strengthen their institutional base and governance as well as improve their macroeconomic environment in order to attract more FDI.

The study (Bénassy-Quéré et al., 2007) contribute to the literature on the determinants of foreign direct investment in developing countries and re-evaluate the role of the quality of institutions on FDI independently of the general level of development. They implement cross-section estimations based on a newly available database with unprecedented detail on institutions for a set of 52 countries, as well as panel data estimations based on Fraser Institute's data. Furthermore, they control for the correlation between institutions and GDP per capita and for endogeneity of institutions. They found that a wide range of institutions, including bureaucracy, corruption, but also information, banking sector and legal institutions, do matter for inward FDI independently of GDP per capita. Interestingly, weak capital concentration and strong employment protection tend to reduce inward FDI. Institutional proximity between the origin and the host country also matters, but they found the little impact of institutions in the origin country. These results are encouraging in the sense that efforts towards raising the quality of institutions and making them converge towards those of source countries may help developing countries to receive more FDI, independently of the indirect impact of higher GDP per capita.

The study investigates the relationship between foreign direct investment and institutional qualities. Using bilateral foreign direct investment (FDI) stocks around the world, they explore

the importance of a wide range of institutional variables as determinants of the location of FDI. While the result shows that better institutions have overall a positive and economically significant effect on FDI, some institutional aspects matter more than others do. Especially, the unpredictability of laws, regulations and policies, excessive regulatory burden, government instability and lack of commitment play a major role in deterring FDI. For example, the effect of a one standard deviation improvement in the regulatory quality of the host country increases FDI. These results are robust to different specifications, estimation methods, and institutional variables. They also present evidence on the significance of institutions as a determinant of FDI over time.

2.2.2. Studies that found the Negative Effects of Institutions on Foreign Direct Investment

The study of Phung, 2017 investigated the impact of institutional and political variables on FDI in developing countries over the period 2002-2014. Using pooled OLS and Arellano-Bond GMM methods, he examines political variables are significant determinates of FDI but not institutional variables (government effectiveness, and corruption) except for the protection of employment contracts. In his study, other variables affect FDI positively and strongly in developing countries like infrastructure, trade openness, and past FDI level.

The study written by Nondo et al., 2016 investigated the impact of institutional quality on FDI in 45 SSA countries. They use fixed effects estimation techniques over the period from 1996 to 2007. The result of the study suggested that institutional quality does not matter in FDI inflow in SSA countries. However, they claim that institutional quality may affect FDI inflow indirectly through stimulating other variables which affect FDI directly like infrastructure, human capital, and health of workers. Also, they found GDP per capita labor supply, trade openness, and gross fixed capital formation have an impact on FDI inflows in SSA countries.

Ameer et al., 2016, investigated the impact of institutional quality on FDI in 110 countries by categorized into developed and developing countries over the period 2002-2012. Using statistical analysis, they found that institutional quality has a significant and positive effect on FDI inflows in the case of developed countries. But, in the case of developing countries, their study will

provide partial or little support for the idea of the impact of institutional quality on FDI due to the weak structured of the institutions.

Also, the study (Peres et al., 2018) examines the impact of institutional quality on foreign direct investment (FDI) by categorising the countries as developed or developing. they measured institutional quality by the sum of control of corruption and rule of law indicators. They provide evidence that institutional quality positively and significantly impacts F.D.I. in developed countries; specifically, the result shows that a one standard deviation change in governance significantly affects F.D.I. by a factor of 0.2225 (using common law and the lagged values of the independent variables as instruments). Ceteris paribus, the results for the developing countries demonstrate that the institutional quality impact is insignificant because of the weak structure of institutions.

2.5 Conceptual Framework

From the basis previes discussed theorieis and theoretical review we reach under this theoretical framework of the study as:

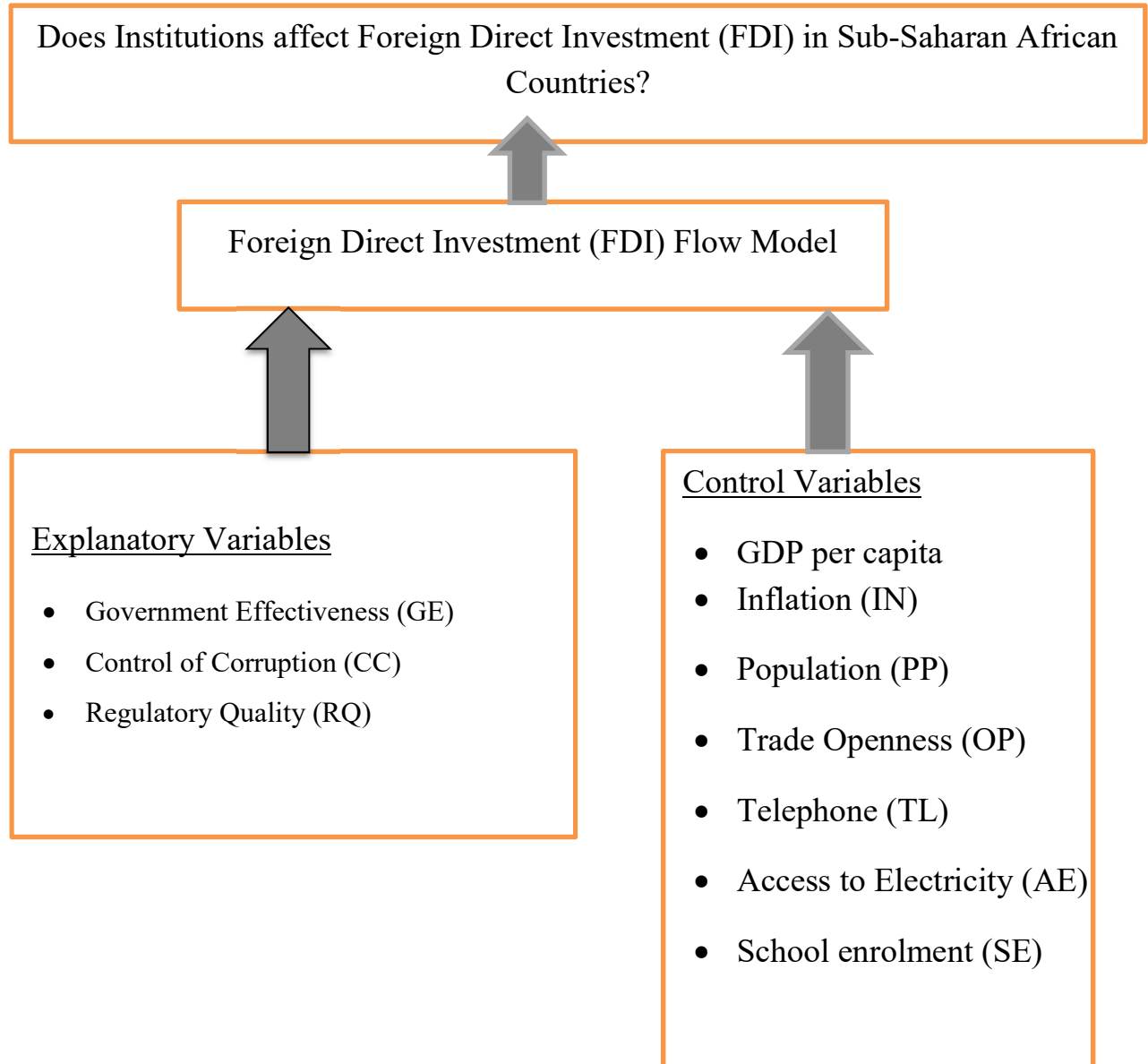


figure 1: a conceptual framework

CHAPTER THREE

3. DATA AND RESEARCH METHODOLOGY

3.1 Introduction

To achieve the major objectives of this paper, which is analyzing the relationship between institutions and FDI in Sub-Saharan African Countries; the study will use secondary data collected from different journals and organizations. To analyze the data the study employed both descriptive and econometric methods of analysis. The detailed explanation of the methodology is explained under the following sub-topics.

3.2 Data Collection and Source

The study completely relied on secondary data collected from official web pages of different international organizations and Journals. And the data of our major explanatory variable which is governance indicators collected from the Worldwide Governance Indicator database. The data of our key dependent variable, FDI, and all control variables were collected from World Development Indicator (WDI) database.

The above-mentioned variable panel data collected for a period of a year from the year 2002 to 2019 for 21 Sub-Saharan African Countries (the list of sample SSA countries are in the appendix); this is mainly due to the availability of a complete set of data on each variable started from the year 2002 to 2019.

With regard to institutional data measurement, there are different sources. But some of them vary in measuring techniques, some are measured in combined form and others are provided in disaggregated manner. For this study data on institutional indicators are collected from World Governance Indicators of the World Bank database; such as Control of Corruption, Governance Effectiveness, and Regulatory Quality. Estimate of each indicator, according to the source, ranges from -2.5 (weak) to 2.5 (strong) governance performance.

3.3 Method of Data Analysis

The Collected data was organized into the appropriate panel form. While the study focused on the econometric method of analysis hence, it used both the descriptive and econometric methods of data analysis.

The descriptive analysis has the following features. It included a trend of FDI and tabular presentation of the summary statistics of all variables such as FDI, lag of FDI, indicators of institutions and other independent variables from the data across sample units and observation years.

The econometric analysis part included a panel data regression model for determining the effect of institutions on FDI in the sample SSA Countries. The econometric methodology employed for this study will be based on the Dynamic Model from Panel data by the System Generalized Method of Moments (GMM).

Generalized Method of Moment is a method for estimating parameters, and it uses moment conditions that are functions of the model statistical parameters and the data, such that their expectation is zero at the parameters' true values. Or, it is called a dynamic panel estimator. A panel data is longitudinal data or contains observations of multiple phenomena obtained over multiple periods for the same individuals.

GMM controls for the endogeneity of the lagged dependent variable in a dynamic panel model when there is unobserved panel heterogeneity, measurement errors, omitted variables bias, and also a correlation between the explanatory variable and the error term in a model. Hence, the econometric methodology employed for this study will be based on the Dynamic Model from Panel data by the System Generalized Method of Moments (GMM) estimators proposed by Arellano and Bond (1991) and then developed by (Blundell & Bond, 1998). This technique has been chosen for its ability to address the simultaneity of bias and country-specific effects. Dynamic models can able to distinguish the relationship between independent variables on dependent variables and get applicable expected results. The sample countries of the study include those that are mainly found in the Sub-Saharan African region.

Sargan's (1985) test is the first one of the GMM diagnostic test of over-identifying restrictions for instrumental validity, and its null hypothesis shows that the overall validity of the instruments is used. Hence, the test gives support to the choice of the instruments.

Autocorrelation test is another GMM diagnostic test; and, its null hypothesis shows that the differenced error term is first and second-order serially correlated. In this test we have to fail to reject the null hypothesis of no second-order serial correlation implies that the original error term is serially uncorrelated and the moment conditions are correctly specified.

3.4 The Model

The theoretical model of FDI is consistent with the existing theories of international production, where the demand for inward-bound FDI is said to depend on a variety of characteristics of the recipient country as well as the emergence and reason for movement of multinational firms across overseas to invest their capital.

To assess the effects of institutions on foreign direct investment in Sub-Saharan African countries, Dunning's eclectic paradigm theory and the motives of FDI flow (Dunning & Lundan, 2008) will be employed to enhance the model for the study. As explained in the literature review of the previous chapter, Dunning's eclectic paradigm theory includes ownership, location, and internalization advantages; and the motives of FDI are resource seeking, market seeking efficiency-seeking, and strategic asset or capability seeking (Dunning & Lundan, 2008). According to the above theory and empirical explanation, FDI mainly depends on institutions, market size, macroeconomic stability, the openness of the economy, and the infrastructure of the host country. Following, Sabir et al., 2019 specified model for FDI,

$$FDI = f(\textit{Institutions, Market Size, Openness of the Economy,} \\ \textit{Macroeconomics Stability, Human Capital, Infrastructure})$$

Location-specific advantage includes institutional, economic, and political advantages of each country; so, we included main explanatory variables as an indicator of the institution, to see the real effects of institutions on FDI inflow on the dynamic panel model. In our model, we include the most significant variables of governance indicators as main explanatory variables in our

institutional indicators such as Government Effectiveness (GE), Regulatory Quality (RQ), and Control of Corruption (CC). Or, this is due to institutional indicators mainly characterized by high correlation with each other (Globerman & Shapiro, 2003).

Institutions; quality of institutions which are described in this study as rule of law, corruption, political freedom and stability, internal conflict, voice and democratic accountability, institutional strength or government effectiveness, regulatory or bureaucratic quality can have significant effect on the flow of foreign investment in host country. For this study, the basic elements of institutions adopted here only serve as useful surrogates in SSA. Thus, we like to include components of the governance indicators as described by World Governance Indicators (WGIs) in our institutional variables. These are: governance effectiveness (GE), regulatory quality (RQ), and control of corruption (CC). The fact that the institutional indicators are highly correlated with each other as depicted by many researchers, Globerman and Shapiro (2003), Daniele et al. (2006), Lucy and Kwadwo.

Hence, those Governance indicators which have been developed by Kaufmann, Kraaye Mastruzzi (2005), have the following reflections and measurements, and each index can take values from -2.5 (low) to 2.5 (high) score as mentioned above. In this study, from the prevailing condition of SSA the most influential ones like governance effectiveness (GE), control of corruption (CC) and regulatory quality (RQ) and their composite average form would be considered separately in our econometric model.

Government effectiveness (GE): reflects the quality of public services, the capacity of the civil service and its independence from political pressure and affiliation. That is the national bureaucracy enjoys autonomy from political pressure in a stable manner and whether it has an effective mechanism for recruiting and training, and as well as having the quality of policy formulation. A high score implies the civil service has the strength and experience to govern without drastic changes in policy and interruptions in government services, which strong positive link with FDI.

Control of Corruption (CC): as pointed out earlier, there are contradictory remarks about corruption, but several investor surveys suggest that one of the most important deterrents of FDI to Africa is corruption. Several papers have also shown that inefficient institutions as measured by corruption and weak enforcement of contracts deter foreign investment (Wei, 2000). The corruption variable measures the degree of corruption within the political system. It covers actual or potential corruption in the form of nepotism, excessive patronage and bribery (Asiedu, 2000, 2006; Cleeve, 2008). The higher the value the greater the transparency (lower the corruption level). Lower score indicates corruption is more prevalent and linked to lower FDI flow.

Regulatory quality (RQ): demonstrates the ability of the government to provide sound policies and regulations that enable and promote private sector development. Among others it include: the ease of regulations concerning licensing requirements and labour, environmental, consumer safety and worker health and other related policies and regulations. The high score implies the government has good regulatory quality that may entail lower costs for foreign investors.

Also, the study included different control variables: from economic advantage or market seeking variables, as market size indicators, we used variables such as Gross Domestic Product (GDP) per capita and population size of a country. The larger the host economies show the larger the market of the country which means the higher GDP and the more FDI inflow (Mohamed & Sidiropoulos, 2010). As economic activity increases this leads to GDP increases and then investment opportunities and motivations to invest increase too, this leads to an increase in the FDI of a country (Kok & Ersoy, 2009). In this study we treated 'GDP per capita' as an endogenous variable; this does change the qualitative nature of the results. Especially, it does change the sign of the variables, which unlikely became negative in our original dynamic. Larger countries or countries with larger population sizes or domestic markets attract more FDI flow to the host countries (Abdoul, 2012).

Trade openness can be defined as a trade ratio that is measured as the sum of exports and imports as a percentage of the GDP of a country. Moreover, the inclusion of the trade openness variable is important, as it could have a significant positive effect to attract capital. When there is more total international interaction or a high value of trade openness shows a low cost of doing business and more investment opportunities for FDI (Aijaz et al., 2014). A country's trade

policies such as export-oriented strategy may increase the incentives to invest in the country if these policies increase the profitability of investment foreign investors may be attracted (Mohamed & Sidiropoulos, 2010).

Macroeconomic stability is one of the factors that enterprises consider when deciding to locate in developing countries. Also, as a macroeconomic stability indicator, we will use variable inflation. Inflation change is generally used as an indicator of macroeconomic instability. High inflation deters economic activity and reduces investment in productive enterprises, thus leads to reduced economic growth (Mohamed & Sidiropoulos, 2010).

Human capital indicators; skilled labor force (as school enrolment) are also the factors that investors consider with a low cost when deciding to locate in developing countries. HC is important for attracting FDI inflow to the host countries. From the location-specific advantage of economic advantage variables like infrastructure includes telephone, electricity, internet, ports, railway, and road; which provide services for enterprises. In this thesis, we use telephone and electricity access as a proxy of infrastructure. Countries with better infrastructure lead to enabling environment for foreign investors by increasing their rate of return from their investment, those countries are expected to attract more FDI (Morisset, 2000). Good infrastructure may also affect economic growth by increasing the productivity of investment and stimulates investment, either foreign or domestic investment (Abdoul, 2012).

As mentioned above since there is no standard procedure that would be used as a common theoretical model for the determinants of FDI flows, some researchers focus on macroeconomic determinants, some on institutional analysis, some on specific factor like infrastructure, natural resource endowment, some determinants of business environment and risks including political stability and some on the combination of different factors. Most researchers who undertake empirical work on the determinants of FDI flows use an ad-hoc specification, that is, they try various indicators that may explain differences in FDI flows across countries and use those that are most suitable for the purpose of their research (see (Asiedu, 2002; Baltagi, 1988)Gastangal et al., 1998, Chakrabarti, 2001,Asiedu,2002, Khadaroo and Seetana, no yr, Baltagi et al., 2009).

Hence, the empirical model for this research has been chosen based on the theoretical frame work discussed on the above sections; and by taking into account the variables that importantly explain the model in the context of the SSA countries under study, and multinational company's way of rationalization. In this case, we select the FDI models that can be appropriate for a given data as below:

FDI model: Foreign direct investment (FDI) with governance effectiveness (GE), regulatory Quality (RQ), and Control of Corruption (CC) as the main explanatory variable. In our dynamic panel model: the lagged FDI (l.FDI) flow is included as an explanatory variable to explain the dynamism of the model.

$$FDI_{it} = f(l.FDI_{it}, GE_{it}, CC_{it}, RQ_{it}, GDP_{it}, PP_{it}, SE_{it}, INF_{it}, TL_{it}, AE_{it}, TO_{it})$$

Where; the indices i and t refer to countries and time respectively. X_{it} is vectors of control variables that affect FDI includes GDP per capita, population (PP), Trade Openness (TO), Telephone (TL), Inflation (INF), access to electricity (AE), and School enrollment (SE). λ is the coefficient of all other independent variables. U_{it} is a random disturbance term. α_i and β refers to the intercept term and the coefficient of key explanatory variables.

TABLE 1: SUMMARY OF VARIABLES, EXPECTED SIGNS OF THEIR COEFFICIENTS, AND DATA SOURCES

Variables	Variable Indicators	Expected Sign	Source
Foreign Direct Investment (FDI)	FDI, net inflows (% of GDP)		World Development Indicators
Government Effectiveness (GE)	Government Effectiveness: Estimate	Mixed	World Governance Indicators
Control of Corruption (CC)	Control of Corruption: Estimate	Mixed	World Governance Indicators
Regulatory Quality (RQ)	Regulatory Quality: Estimate	Mixed	World Governance Indicators
Gross Domestic Product (GDP) Per capita	GDP per capita (constant 2010 us\$)	positive	World Development Indicators
Inflation (INF)	Inflation, consumer prices (annual %)	Negative	World Development Indicators
Population (PP)	Population ages 15-64, total	Positive	World Development Indicators
Trade Openness (OP)	Export plus import as a % of GDP	Mixed	World Development Indicators
Telephone (TL)	Fixed telephone subscriptions (per 100 people)	Mixed	World Development Indicators
Access to Electricity (AE)	Access to electricity (% of the population)	Mixed	World Development Indicators
School Enrolment (SE)	School enrolment, Secondary (% gross)	Mixed	World Development Indicators

CHAPTER FOUR

4. DATA ANALYSIS AND INTERPRETATION

This chapter presents an analysis of the data using both descriptive statistics and econometric analysis. This chapter is included two sections. The first section is an analysis of the data using descriptive statistics. Then the second section presents an econometric analysis of the data, which leads us to make conclusions about the relationship between explanatory and explained variables.

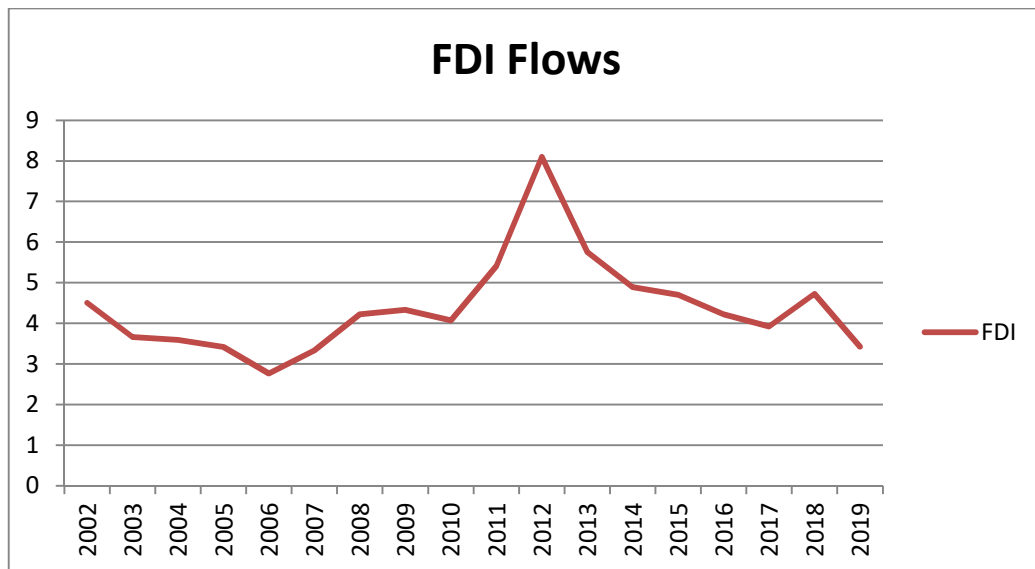
4.1 Descriptive Analysis

This chapter presents an analysis of the data using both descriptive statistics and econometric analysis. This chapter is included two sections. The first section is an analysis of the data using descriptive statistics. Then the second section presents an econometric analysis of the data, which leads us to make conclusions about the relationship between explanatory and explained.

4.1.1 Trends of Foreign Direct Investment

Under this topic, this study analyzes the trend of foreign direct investment in the Sub-Saharan African region.

FIGURE 2: FDI TREND; SOURCE WORLD DEVELOPMENT INDICATORS AND AUTHOR'S COMPUTATION



From the above figure 1, the trend of foreign direct investment in the Sub-Saharan African region over time from the year 2002 to 2019 shows fluctuation. FDI in 2008, 2012, and 2018 are relative peaks of FDI flow on average in the SSA region. On the other hand, FDI in 2006, 2010, 2017, and 2019 are relative bottoms of FDI flow on average in the SSA region. In general, FDI flow to the region recorded the highest in Seychelles in the year 2012 and the lowest in Chad in the year 2006 on average.

4.1.2 Summary of Statistics

Under this topic, a summary of statistics of all variables are explained; for instance, their overall maximum and minimum, mean, and standard deviation; and there between and within maximum and minimum, mean, and standard deviation, are below the table.

TABLE 2: SUMMARY OF STATISTICS

Variable		Mean	Std. Dev.	Min	Max
FDI	overall	4.392126	6.386923	-11.6248	57.8375
	between		3.959891	0.5571204	15.44491
	within		5.081254	-15.14667	48.37551
GE	overall	-0.5125198	0.5905224	-1.62612	1.05699
	between		0.5770217	-1.407536	0.8141871
	within		0.1754322	-1.24805	0.2507852
CC	overall	-0.424424	0.6308305	-1.53146	0.969213
	between		0.6187395	-1.38195	0.7949313
	within		0.1799217	-1.250632	0.2078092
RQ	overall	-0.4859762	0.5253695	-1.67383	1.12727
	between		0.5059311	-1.407903	0.8193734
	within		0.1777332	-1.199342	0.4094766
GDP	overall	2372.579	3014.781	194.873	15048.7
	between		3027.524	227.3393	11625.49
	within		579.9328	-543.1303	5795.79
AE	overall	41.39305	29.94638	3.20732	100

	between		29.52134	6.219918	98.22401
	within		8.027773	17.86367	86.89905
SE	overall	45.42922	25.77918	6.54661	109.444
	between		24.14235	13.74711	95.25719
	within		8.888746	25.44351	66.39622
PP	overall	6738925	1.01e+07	27695	5.40e+07
	between		1.02e+07	31804.17	4.36e+07
	within		1745816	-1816631	1.72e+07
TO	overall	72.9185	39.85401	16.6685	225.023
	between		39.34828	30.8119	186.6031
	within		12.43905	41.05797	140.9732
INF	overall	6.940613	8.111566	-8.97474	63.2925
	between		5.450827	1.542028	21.96306
	within		6.099984	-7.825709	48.27005
TL	overall	4.625668	8.137688	0.040911	36.1276
	between		8.203687	0.2001791	30.16211
	within		1.04222	-0.6006029	11.15741

From the above table, we can understand the tabular presentation of the overall summary statistics of institutions and other independent variables from the data across sample units and observation years. From the overall summary statistics, foreign direct investment flow to the region recorded the maximum with a value of 57.8375 in Seychelles in the year 2012. While the minimum FDI flow value -11.6248 recorded in Mauritania in the year 2019 this could show that there was no investment activity. In general, the overall mean value of FDI is 4.3921 it could imply there is investment activity.

The overall mean value of governance effectiveness in the SSA region is -0.5125, which shows there is low effectiveness of the government in different perceptions such as the quality policy formulation and implementation; the responsibility of the government's commitment to the policies; the quality of public services, civil service and degree of independence from political pressures. The estimates of governance effectiveness recorded the maximum with a value of

1.0569 in Mauritius in the year 2015; while the minimum value -1.6261 was recorded in Chad in the year 2007 among the sample SSA countries.

The overall mean value of control of corruption is -0.424424, which implies there is a presence of corruption in the SSA region. The estimates of control of corruption recorded the maximum with a value of 0.9692 in Seychelles in the year 2019; while the minimum value -1.5314 was recorded in Sudan in the year 2017 among the selected SSA countries. Also, the overall mean value of regulatory. The estimates of the regulatory value recorded the maximum with a value of 1.1272 in Mauritius in the year 2014; while the minimum value -1.6738 was recorded in Sudan in the year 2019 among the sample SSA countries.

From market size indicators, the maximum value of GDP per capita recorded is 15048.7 in Seychelles in the year 2019, while the minimum is 194.873 in Ethiopia in the year 2003. Also, the overall mean value of GDP per capita is 2372.579, which shows the economic performance of the SSA region. Also, 54 million people are the highest population size recorded in Nigeria in the year 2019; and 27695 is the lowest recorded in Seychelles in the year 2002.

From infrastructure indicators; in 2019 the highest number of telephone subscriptions per 100 people in the SSA region was recorded in Mauritius with a value of 36.1276 and in 2019 the lowest is recorded in Chad with a value of 0.0409. Among the sample SSA countries, the overall mean value of access to electricity (% of the population) is 41.3930, the maximum value is 100 recorded in Seychelles in the year with a continuous from 2014 to 2018, and the minimum value is 3.2073 which recorded in Burundi in the year 2005.

Also from human capital indicators; the overall mean value for school enrolment, secondary (% gross) is 45.4292; its highest value is 109.444 which is recorded in South Africa in the year 2015; it shows that there is high access of skilled labor force. And the lowest value of access school enrolment is 6.5466 recorded in Niger in the year 2002, which may imply that their low access of skilled labor force among SSA countries.

From Macroeconomic conditions indicators; the overall mean value for inflation, consumer prices (annual %) is 6.9406; though the lowest value is -8.9747% which is found in Chad in the year 2007. And the highest value of inflation is 63.2925 which is found in Sudan in the year

2018 which implies that there is the instability of price or high inflationary problem. Among the sample SSA countries, the overall mean value of trade openness is 72.9185, the maximum value is 225.023 recorded in Seychelles in the year 2009, and the minimum value is 16.6685 which are recorded in Sudan in the year 2019.

4.2 Econometric Analysis

Under this topic, this study presents the deep econometric analysis of the data using panel econometrics approaches.

4.2.1 Estimation and Diagnostic Test Results

In this topic, the key objective is to estimate the effect of institutional indicators and other independent variables on the FDI in the sample countries of the SSA region. To identify the way to treat the individual effect, we use the System General Method of Moment (SYS-GMM) of Arellano and Bover (1995) and Blundell and Bond (1998).

The result obtained from the regression of the effect of institutional indicators such as Government Effectiveness (GE), Control of Corruption (CC), and Regulatory Quality (RQ) on foreign direct investment (FDI) in the sample countries of the SSA region in a dynamic model will see in table 3 as below.

Dependent variable: lnFDI

Independent variables	Coefficient
l.lnFDI	0.2072 (0.1337)
GE	7.6691*** (2.3570)
CC	-2.38385* (1.2619)
RQ	-2.1376 (1.4221)
lnPP	8.6396*** (3.1718)
lnGDP	6.5453*** (2.6022)
lnAE	-4.5251** (2.0440)
lnINF	0.0746 (0.1175)
SE	-0.0695*** (0.0220)
lnTL	1.6266** (0.7322)
lnTO	-2.4446 (1.9977)
constant	-143.6642*** (49.9080)
Wald chi2(11)	43.19

Sargan Test, p-value	1.0000
AR(1), p-value	0.0297
AR(2), p-value	0.1804
Number of Observation	256
Number of Countries	21

TABLE 3: SYSTEM GMM REGRESSION RESULT OF FDI WITH GE, CC, AND RQ.

Notes: ln' shows the natural logarithm of the variables; standard errors are in parentheses; and ***, **, and * indicate the significance of the coefficients at 1%, 5%, and 10% levels of significance, respectively.

From the table above, we can observe that most of the usual variables of the dynamic models are significant with their expected signs. For instance, current foreign direct investment (FDI) is positively related to the FDI of the previous year in our model. There is a 1 percent increase in lagged foreign direct investment could lead to on average 0.2072 percent increase in the FDI, ceteris paribus or other things being constant. This is theoretically appealing since the previously established FDI relationship is expected to pave the way for more investment in the host countries of the SSA region in the subsequent year. The result shows that there is a self-reinforcing effect of FDI on the coming year coming FDI inflow to the host countries. The region's existing FDI stock can attract new FDI inflow to the host countries; this shows the agglomeration effect on FDI flow. It also confirms the validity of the dynamic specification of the model. Thus, governments need to collaborate with existing foreign investors in their countries to promote their countries to other potential investors and to attract new foreign investors. This positive relation between FDI and lag of FDI to attract new FDI flows show that this finding is consistent with the study such as Crozet et al., 2004; Abdoul, 2012 explained that the importance of agglomeration on FDI flow.

Institutional variables, such as governance effectiveness (GE) have the expected positive sign and significant at a 1% level in our dynamic panel model. So, good government effectiveness is important for the attraction of FDI inflow to the sample countries of the SSA region. Good governance effectiveness can be expressed in different perceptions such as good quality of public services, civil service and degree of independence from political pressures, good quality of

policy formulation and implementation; and the responsibility of the government's commitment to the perspective of different policies. This result shows governance effectiveness (GE) is the main and important determinant of foreign direct investment flow to the Sub-Saharan Africa region. Moreover, governance effectiveness captures the government's ability and credibility to formulate and implement sound policies and regulations that promote private sector development.

Control of corruption is significant at 10% level in the model with a negative sign. The result may imply that control of corruption has a good potential to attract FDI flow to the host countries in the SSA region. Hence, the econometrics results also show that the coefficient of control of corruption is negative this could imply there is corruption and the existing degree of control of corruption is not high enough to drive more FDI inflow to the region, or this points out that there has been public power is exercised for private gain and private interests of the state, and also there is an existence of bribery, or nepotism that have existed prevalently in SSA countries.

From market size indicators, Gross Domestic product (GDP) per capita and population (PP) are significant at a 1% level and have a positive association with foreign direct investment (FDI) in our dynamic panel model in the sample countries of the SSA region. There is a 1 percent increase in GDP could lead to on average 6.5453 percent increase in the FDI, *ceteris paribus*. Hence, FDI is attracted more to a country with high purchasing and real income. The higher domestic economic growth allied with the higher FDI flow to the host countries specifically, when economic growth results in economies of scale or when foreign investment is seeking consumers market. So, GDP per capita has a considerable effect on FDI flow. This implies that represents the host country's economic conditions and potential demand is an important element in FDI decision-making.

Also, a country with a large population shows large size of the market that may attract FDI inflow on a large scale to the SSA region. There is a 1 percent increase in population could lead to on average 8.6396 percent increase in the FDI, *ceteris paribus*. The more population shows the more market size in the region. Those populations could work on investment enterprises this would easy to access the required population investors they need. So, GDP per capita and the population is a key determinant of FDI flow to the SSA region. This result agrees with the

expectations of the study and consistent with the study of Asiedu, 2002, Abdoul, 2012 explained that importance of market size for FDI flows.

Infrastructural variables; telephone subscription (TL) (per 100 people) and access to electricity (AE) (% of the population) are significant at 5% level. This implies that the existing infrastructural condition of the sample countries of the region can attract or capable of catching the attention of multinational enterprises to the SSA region. Telephone subscription has a positive association with FDI flow to the SSA region in our dynamic model; there is a 1 percent increase in telephone subscription could lead to on average 1.6266 percent increase in the FDI, *ceteris paribus*. Countries with a high number of fixed telephone subscriptions per 100 people can attract FDI inflow to the host countries. Though, AE has a negative association with FDI in SSA region in our dynamic model. This may imply that adequate access to electricity is not well developed to attract FDI flows in the SSA region. This result shows consistency with the study of Siddica & Nur Angkur, (2017) studies the important infrastructure for the attraction of FDI flows to the host country.

Human capital variables; school enrolment (secondary (% gross) (SE)) is significant at 10% level and this implies that the existing school enrolled people or skilled labour forces can increase FDI inflows by making the investment climate attractive for the foreign investors. This can be done through the effect of an upgraded skill level of the workforce. However, school enrollment and FDI have a negative association in our model, this could due to the existing skilled labour force are low in number or they are less educated to attract FDI flow to the SSA region. FDI flow could reduce due to low school enrollment (skilled labor force). This result agrees with the study of Law Siong Hook et al., (2013) who explained that importance of human capital for the attraction of FDI flows host country.

According to the result, the coefficient of regulatory quality (RQ), trade openness, and inflation are insignificant for FDI flow to the sample countries of the SSA region. The macroeconomic stability condition may show that there is an existence of price instability or inflationary problem in the sample countries of the region. There is a 1 percent increases in the inflation rate would lead to a decrease in foreign direct investment by 0.0746 percent, *ceteris paribus*.. A high inflation rate could affect the profitability of investment as higher prices can lead to increased

costs and lower profits, this could have an adverse effect on the attraction of FDI inflows and economic growth of the SSA region. High inflation distorts economic activity and reduces investment in productive enterprises, thus reducing economic growth. This result shows consistency with the study of Mohamed & Sidiropoulos, 2010.

In order to deal with the consistency of the underlying system GMM estimator, the Sargan and the autocorrelation tests are also given. Sargan's test of over-identifying conditions the null of this test is that over-identifying restrictions are valid. From the result of the estimation, the Sargan test's p-values are 1.0000 for our model, and this shows that the overall validity of the instruments used in the system-GMM estimator is valid and our model is well specified.

The autocorrelation test, the first-order autocorrelation test show rejection of the null hypothesis of no autocorrelation, which implies that independently and identically distributed residuals, would be autocorrelated. Hence, the autocorrelation of first-order AR(I) is constantly misleading and not predictable. To test the presence of autocorrelation, the second-order AR(II) autocorrelation test is recommended than the first-order autocorrelation test. The result of the estimation of the autocorrelation test is with p-values of 0.1804 and fails to reject the null hypothesis, which attests that there is no autocorrelation. This result displays that the residuals are not second-order correlated and presents there is no evidence that the model is misspecified.

CHAPTER FIVE

5.1 CONCLUSIONS

Institutions are one of the key factors of foreign direct investment and economic performance in the host countries. Following this statement, this thesis investigates dynamic factors of FDI flow to Sub-Saharan Africa countries. FDI flow to the region has some progress but it is not good enough. Indeed, several factors affect FDI flow to the countries based on the situation of the SSA region. Among the key basic factors: quality of institutions such as governance effectiveness, control of corruption, and regulatory quality, and also control variables: market size indicators, infrastructural condition, resources availability, macroeconomic stability, and trade openness have been explored their effects on FDI flows to the region.

Our main explanatory variables institutions such as good governance effectiveness and control of corruption are key fundamental factors and have good potential to attract foreign direct investment flow to the host countries in the SSA region; however, the measures to reduce corruption and to compliance regulatory quality could not enough to drive more FDI inflow to the region. Also, Current foreign direct investment (FDI) is positively related to the FDI of previous. Moreover, governance effectiveness captures the government's ability and credibility to formulate and implement sound policies and regulations that promote private sector development. So, efficient bureaucracy can decrease the costs of doing business and deny the opportunities for corruption thereby deterring FDI inflows.

Our explanatory variables; market size indicators (GDP per capita and Population), fixed telephone subscriptions, access to electricity, are skilled labor force are key determining factors of foreign direct investment flow to the SSA region. Though, the existing school enrolled people may be low or they are less educated to attract FDI flow to the sample countries of the SSA region, and there is low adequate access of electricity in the region to attract FDI flow. While macroeconomic condition; inflation is not significant to attract FDI inflow to the SSA region.

5.2 Recommendations

From the result of the study; in Sub-Saharan African countries, foreign direct investment is exclusively determined by institutions and some external factors. Several recommendations can be derived based on the result of the study to realize the effect of institutions on FDI in SSA countries. The following measures may help to improve FDI inflows in the region.

Sub-Saharan Africa countries should attempt to build and improve appropriate institutions in advance especially improving their regulatory quality and improve governance effectiveness, and also increase the degree of control of corruption. Policies of such issues might be formulated by focusing on improving their institutions; and countries should have commitment and responsibilities to take more action to improve the ability of the government to provide sound policies and regulations, reduce corruption, and effectiveness of the government of the host countries. Hence, having a good quality of an institution is a useful tool that SSA countries should take up to improve their global positioning in FDI inflow.

Sub-Saharan African countries should increase their market size to improve FDI flow or to be competitive in the global investment flow market such as GDP per capita. And also, the region should expand school access to get a more skilled labor force. Also, countries should increase the expansion of telecommunication infrastructures and access to electricity to attract foreign investment flow to the host countries of the Sub-Saharan African countries.

To attract FDI flows in the SSA region, policies on reducing macroeconomic instability and trade barriers are important and should not be overlooked.

5.3 Further study

To arrive at a final conclusion of the relationship between institutions and foreign direct investment flow, an comprehensive collection of tests and plenty of further research will be required. Thus far, no one has been delivered indisputable evidence of the link between them. This will requires in-depth studies of transmission channels linking the institutions and foreign direct investment. In addition, the nexus between institution and FDI will require further research by considering different institutional measures.

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Appendix

I. System GMM Regression Results of Econometric models & TESTS

Regression Result for FDI and Governance Indicators such as Control of Corruption (CC), Regulatory Quality (RQ), and Government Effectiveness (GE).

```

System dynamic panel-data estimation      Number of obs   =      256
Group variable: cid                      Number of groups =      21
Time variable: year

Obs per group:
      min =      5
      avg =    12.19048
      max =     16

Number of instruments =    204           Wald chi2(11)   =     43.20
                                           Prob > chi2     =     0.0000
Two-step results

```

lnFDI	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnFDI						
L1.	.2072443	.133787	1.55	0.121	-.0549733	.4694619
lnGDP	6.545885	2.602516	2.52	0.012	1.445047	11.64672
CC	-2.383987	1.262026	-1.89	0.059	-4.857513	.089539
GE	7.669621	2.357301	3.25	0.001	3.049396	12.28985
RQ	-2.138138	1.422351	-1.50	0.133	-4.925894	.6496179
lnINF	.0746505	.1175495	0.64	0.525	-.1557422	.3050433
lnTO	-2.444992	1.997852	-1.22	0.221	-6.36071	1.470725
lnPP	8.640348	3.172218	2.72	0.006	2.422916	14.85778
lnTL	1.626766	.7323641	2.22	0.026	.1913588	3.062173
lnAE	-4.525543	2.044277	-2.21	0.027	-8.532253	-.5188338
SE	-.0695657	.0220253	-3.16	0.002	-.1127345	-.026397
_cons	-143.6751	49.91398	-2.88	0.004	-241.5046	-45.84546

Sargan Test

```

Sargan test of overidentifying restrictions
H0: overidentifying restrictions are valid

chi2(192)   =   7.138815
Prob > chi2 =   1.0000

```

Autocorrelation Test

Arellano-Bond test for zero autocorrelation in first-differenced errors

Order	z	Prob > z
1	-2.1747	0.0297
2	1.3397	0.1804

H0: no autocorrelation

II. Summary of Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
FDI	overall	4.392126	6.386923	-11.6248	57.8375	N = 378
	between		3.959891	.5571204	15.44491	n = 21
	within		5.081254	-15.14667	48.37551	T = 18
GE	overall	-.5125198	.5905224	-1.62612	1.05699	N = 378
	between		.5770217	-1.407536	.8141871	n = 21
	within		.1754322	-1.24805	.2507852	T = 18
CC	overall	-.424424	.6308305	-1.53146	.969213	N = 378
	between		.6187395	-1.38195	.7949313	n = 21
	within		.1799217	-1.250632	.2078092	T = 18
RQ	overall	-.4859762	.5253695	-1.67383	1.12727	N = 378
	between		.5059311	-1.407903	.8193734	n = 21
	within		.1777332	-1.199342	.4094766	T = 18
GDP	overall	2372.579	3014.781	194.873	15048.7	N = 378
	between		3027.524	227.3393	11625.49	n = 21
	within		579.9328	-543.1303	5795.79	T = 18
AE	overall	41.39305	29.94638	3.20732	100	N = 357
	between		29.52134	6.219918	98.22401	n = 21
	within		8.027773	17.86367	86.89905	T = 17
SE	overall	45.42922	25.77918	6.54661	109.444	N = 333
	between		24.14235	13.74711	95.25719	n = 21
	within		8.888746	25.44351	66.39622	T-bar = 15.8571
PP	overall	6738925	1.01e+07	27695	5.40e+07	N = 378
	between		1.02e+07	31804.17	4.36e+07	n = 21
	within		1745816	-1816631	1.72e+07	T = 18
TO	overall	72.9185	39.85401	16.6685	225.023	N = 373
	between		39.34828	30.8119	186.6031	n = 21
	within		12.43905	41.05797	140.9732	T-bar = 17.7619
INF	overall	6.940613	8.111566	-8.97474	63.2925	N = 375
	between		5.450827	1.542028	21.96306	n = 21
	within		6.099984	-7.825709	48.27005	T-bar = 17.8571
TL	overall	4.625668	8.137688	.040911	36.1276	N = 372
	between		8.203687	.2001791	30.16211	n = 21
	within		1.04222	-.6006029	11.15741	T = 17.7143

III. Definitions of Governance Indicators

Indicators	Definition
Governance Effectiveness	Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
Control of Corruption	Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.
Regulatory Quality	Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
Voice and Accountability	Captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
Political Stability and Absence of Violence/ Terrorism	measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism
Rule of Law	captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

IV. Lists of Sub-Saharan African Countries Included in the Study Sample

Burkina Faso

Mauritius

Burundi

Mozambique

Cabo Verde

Niger

Cameroon

Nigeria

Chad

Rwanda

Ethiopia

Senegal

Ghana

Seychelles

Lesotho

South Africa

Malawi

Sudan

Mali

Swaziland

Mauritania