The Role of Foreign Direct Investment in the Process of Industrialization of West Africa Countries

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Table of Contents

List of Tables

List of Figures

List of Acronyms

ASEAN	Association of Southeast Asian Nations
FDI	Foreign Direct Investment
GMM	Generalized Method of Moments
IPA	Investment Promotion Agency
MNCs	Multinational Corporations
MNEs	Multinational Enterprises
OECD	Organization for Economic Corporation and Development
UNCTAD	United Nations Conference for Trade and Development
WDI	World Development Indicators

Abstract

The study sets out to look at the role of FDI in the process of industrialization of West Africa. In pursuit of this, the main question that the study seeks to find answer to is how does FDI affect industrialization of West Africa? To find answer to this main question, the study asks three questions which are: what is the effect of FDI on industrialization of West Africa? Does institutional quality moderates the relationship between FDI and industrialization of West Africa? What is the trend of FDI inflows into West Africa in the decade from 2011 to 2020? The study addresses these questions by employing the quantitative research approach and the explanatory research method. The study utilizes data on countries in West Africa, out of which one country is excluded for not having data on some indicators, leaving 15 countries. The twostep system GMM estimation strategy as well as trend analysis are employed to analyze the data. The study finds that FDI has no significant link with industrialization. Moreover, the study reveals that institutional quality does not moderate the relationship between FDI and industrialization. Additionally, it emerges that the trend of FDI inflows into the West African region during the period from 2011 to 2020 is more of a W-shape trend, with downward and upward patterns. The study concludes that FDI is not a major determinant of industrialization of the West African region, even though it may be a major determinant in other regions. Additionally, the study concludes that the quality of institutions in the West African region exert no influence on the relationship between FDI and industrialization of West Africa. The study recommends that governments in the West African region should focus on developing policies that provides fertile grounds for FDIs to flow into sectors of the economy that can contribute to the process of industrialization of the region, such as tax incentives for industry-based FDIs. Additional recommendation is made that governments within the West African region should focus attention on strengthening the robustness of institutions to effectively drive the inflow of industry-based FDIs since the quality of institutions is one of the key factors that investors consider in deciding on whether to invest in an economy or otherwise.

Relevance to Development Studies

This study is relevant to development studies in that it tries to examine how FDI contributes to industrialization of West Africa. It is worthy of note that industrialization is a major economic development strategy for most countries. Additionally, FDI has become a major way tool for economic growth and job creation, especially in developing economies. Hence, a study of this nature

that tries to look at the how major factors that are key in the process of development of most developing an emerging economies is in no doubt well suited as a study relevant to development studies.

Keywords

Foreign Direct Investment, Industrialization, Institutional quality, West Africa,

CHAPTER 1: INTRODUCTION

1.1 Background to the Study

Over the last several decades, the African continent, particularly the West African sub-region has trailed behind the rest of the world with regard to development. Significant number of countries in the sub-region have not pushed to diversify their economies and rely largely on the primary sector. Undoubtedly, the primary economic activities do not provide significant benefit to the countries in respect of employment generation and value-added products (Armah, 2013).

Essentially, a strategy that can push the countries in the region to diversify their international trade and economy is industrialization (United Nations. Economic Commission for Africa, 2013; Rekiso, 2017). Industrialization is primarily a shift of an economy from a predominantly primary sector base to a manufacturing sector base. One scholar also describes it as the structural changes experienced by less developed countries in the transition from an agrarian to an industrial economy, which happens together with sociological changes (Kuznets, 1973). Most developed countries all went through this process in the growth of their country. Indeed, some empirical studies have established that industrialization is a key driver of economic development and thus, refer to it as an indispensable element of the development agenda of every country (Opoku & Yan, 2019; Cheremukhin, et al., 2017; Szirmai & Verspagen, 2011).

It is worthy of note that in as much as industrialization is identified as a major tool to propel economic development, it requires substantial amounts of money and technology. Majority of countries in the sub-region either lack or do not have sufficient financial and technical resources necessary to industrialize their economies. This means that efforts to industrialize would need external sources of financial and technological support. Some scholars contend that a major step toward the course attracting external sources of financial and technological support to advance the industrialization agenda of developing economies such as that of countries in the West African sub-region is through foreign direct investment (Oduola, et al., 2021; Kriaa, et al., 2017).

Foreign direct investment (hereinafter referred to as FDI) flows between economies have increased dramatically since the turn of the twentieth century, coinciding with the rise of globalization. Developing countries, emerging markets, and transition economies have increasingly come to recognize FDI not only as a source of economic development and modernization but also as a true

engine for economic growth and job creation (Iamsiraroj, 2016). FDI in West Africa has been on the rise for many years. It rose by 12 percent between 2015 and 2016 and recorded further increases until 2020 when it declined by 18 percent, mainly due to the emergence of the COVID-19 pandemic.

Oduola, et al. (2021) indicate that the potential benefits of FDI encompass employment creation, export promotion, and capital formation. Per the authors, these continue to be among the most important reasons for pursuing FDI. These enable indigenous companies to be more efficient and perform better. It is believed that FDI inflows have both financial and technological spillovers that stimulate economic growth in the host nation (Kriaa, et al., 2017). In addition, Nkoa (2017) demonstrates that host nations can gain from FDI via forwarding and backward linkages. For instance, when a foreign company enters a local economy, a linking effect is created when the international corporations acquire local inputs from domestic companies, leading to the establishment of more local firms to meet the demands of the global corporation. This makes FDI very critical in driving economic development. Pegkas (2015) observes that FDI is largely favoured above other forms of capital inflows because it tends to be more stable. This decreases the risk associated with rapid swings inflows and makes the receiving country more resilient. Di Maio (2009) emphasizes that FDI played a central role to transition the economies of most countries in East Asia into industrial economies. Thus, cementing the fact that FDI plays a major role in industrialization, which consequently affect economic development. With respect to the West African context, the role of FDI in the industrialization process of the region has not been extensively explored, to which end the tries to empirically investigate it in order to present an insight into the role that FDI plays in the industrialization process of West Africa.

1.2 Statement of Research Problem

Industrialization has numerous advantages, particularly in the long run, such as economic diversification, unemployment reduction, technology transfer, and welfare improvement (Beji & Belhadj, 2014). Indeed, the importance of industrialization is reinforced by the United Nations when it decided to pursue Sustainable Development Goals which, among other things seek the advancement of inclusive and sustainable industrialization and has a target to raise the industry's share of employment and gross domestic product in line with national circumstances by 2030 (United Nations, 2015). To advance the course of industrialization, a strand of literature has indicated foreign direct investment (FDI) as a major catalyst to enhance the tendency to attract technological and managerial

know-how, enable access to regional value chains, promote firm efficiency, investment flows, and increased productivity (Chen, et al., 2015). Nonetheless, other strand of scholars suggest that FDI have truncating impact on industrialization because it heightens competitive pressure that crowd out domestic firm (Konings, 2001; Barrios, et al., 2005; Gui-Diby & Renard, 2015; Kriaa, et al., 2017).

It is worthy of note that the literature evidence point to vast research in respect of FDI-industrialization nexus (e.g. Nkoa, 2017; Gui-Diby & Renard, 2015; Kriaa, et al., 2017; Müller, 2021; etc.). Indeed, these extant studies have addressed relevant themes and gaps in research, yet, the subject remain inconclusive. Research on the role of FDI in the industrialization process of countries in the West African sub-region remain scanty and this leaves the subject for further discourse and empirical investigation. Therefore, this study attempts to shed light on the role of role of FDI in the industrialization process of West Africa.

1.3 General Objective

The underlining focus of the study is to investigate the role of FDI in the industrialization process of countries in the West African sub-region.

1.3.1 Specific Objectives

Flowing from the general objective, the following specific objectives are pursued.

1. To examine the effect of FDI on industrialization in West Africa.
2. To determine whether institutional quality moderates the relationship between FDI and industrialization.
3. To analyze the trend of FDI inflows into West Africa in the last decade from 2011 to 2020.

1.4 Research Questions

1. What is the effect of FDI in industrialization in West Africa?
2. Does institutional quality moderates the relationship between FDI and industrialization in West Africa?
3. What is the trend of FDI inflows into West Africa in the decade from 2011 to 2020?

1.5 Relevance and Justification

The study will provide significant importance to policymakers, academics, and industry. It is important to emphasize that the study will provide insight into the connection between FDI and industrialization in West Africa. Knowing whether policies that aim to attract FDI inflows are integrated into industrial policies and actually help in the region's industrialization drive would help to set a direction for a new generation of policies since countries in the region desire to move in this direction. Further, the study builds on extant literature on FDI and industrialization. Hence, there is no doubt that it will contribute knowledge to the pool of literature on FDI and industrialization, particularly, in respect of the West African context which is scanty in literature. Thus, the study will serve as a reference point for further studies on the subject of investigation.

1.8 Scope and Limitations

The study covers all 16 West African countries. The study covers the period from 2001 to 2020. The contextual discussions center on FDI and industrialization. Thus, specifically, the study is confined to the trends of FDI and industrialization as well as how FDI affects industrialization as outlined in the research objectives. Geographically, the study concentrates on West Africa, which is located in the sub-Saharan Africa.

The major limitation that is expected is that some countries may not have data for some of the periods which may lead to an unbalanced panel dataset. However, the research will purposively focus on only countries that have data for all the respective years to ensure that balanced panel data is obtained for the study.

1.7 Summary of Methodology

The study uses the quantitative research design as the study employs quantitative data and quantitative techniques to address the research objectives. The population of the study is the 16 countries in the West African sub-region, of which the purposive sampling technique is employed to select 15 countries. The study uses secondary data. Specifically, the data is a panel data of annual frequency that span a period of eleven years from 2010 to 2020. The data are sourced from the World Development Indicators database and the World Governance Indicators database of the World Bank. The panel

estimation techniques are employed to analyse the data. Specifically the twostep system Generalized Method of Moments is employed. The analysis is done with the help of the Stata Statistical Software.

1.8 Organization of the Study

The study is organized into five chapters. The first chapter is the introduction section of the study. It comprises sub-sections such as the background of the study, problem statement, aims and objectives of the research, research questions, scope, and summary of research methodology, significance, and structure of the study. The second chapter looks at the literature review which is made up of conceptual review, theoretical review, and empirical review. The third chapter addresses the research methodology adopted for the study. The fourth chapter presents the analysis and discussions and the fifth chapter addresses the summary of findings, conclusions and recommendations.

1.9 Chapter Conclusion

This first chapter outlines the main elements of the study, justifies the choice of topic, and details the research questions that guide the study. It began by providing the background to the study where the core overview and understanding of the subject of investigation was addressed. The chapter then gave the statement of problem which highlight the need for the study by pointing out the gap which made the current study worth conducting. The chapter also looked at the research objectives and questions that are critical and demands answers from the study, thus, serving as the critical guide for the study. The relevance and justification of the study was also highlighted in this chapter, together with the scope of the study. Another major highlight of this chapter is that it looked at the summary of methodology which has the methods adopted to undertake the study at a glance. The arrangement of chapters was also provided in this chapter to give a clear picture of how the entire work would be structured.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter features in-depth review of the research project's corresponding literature. The chapter focuses on the review of literature from three different angles: the conceptual review, the theoretical review, and the empirical review. The first part of the review, titled "conceptual review," provides discussion on the definition and overview of certain significant terms. In the second part, discussion is provided on pertinent ideas to the investigation and report on the theoretical review. The empirical portion is discussed in the third section; its primary function is to recount findings from related investigations.

2.1 Conceptual Review

2.1.1 Foreign Direct Investment (FDI)

Foreign direct investment (FDI) is defined as the acquisition or construction of assets by foreigners, either independently or in collaboration with local partners in an economy that is outside the country of the foreign investor(s) (Kwoba and Kibati, 2016). The IMF and OECD (1996) define FDI as an investment including a long-term relationship and reflecting a long-term interest and control by a resident entity in one economy (foreign nation) in a company resident in an economy other than the foreign direct investor's (FDI enterprise or affiliate enterprise or foreign affiliate). According to the OECD, the word "lasting interest" as employed in the definition implies a long-term relationship between the direct investor and the direct investment firm, as well as a significant degree of control over the latter's management. According to the International Monetary Fund (IMF) and OECD standards, long-term interest is demonstrated when a direct investor owns at least 10% of the voting power in a direct investment business. It should be noted that the aims of direct investment differ from those of portfolio investment, in which investors generally do not intend to influence the management of the firm. Thus, FDI is defined as a type of investment in which a company based in one nation acquires a share in a company based in another country through acquisition, merger, license, or the construction of a new facility. In other terms, FDI is an investment in a business by a foreign investor that gives the foreign investor control over the company purchased.

Multinational Corporations (MNCs) or Multinational Enterprises (MNEs) are companies that engage in FDI (MNEs). Firms typically invest abroad when they have assets that complement the features of the host country and result in considerable profits that would not have been generated if the firm had operated locally (Li and Vashchilko, 2010). FDI is an example of international factor movement and, as such, serves as a channel via which diverse factors of production flow from origin nations to host countries.

This study describes FDI in accordance with the OECD's definition and description of FDI, and distinguishes it from Foreign Portfolio Investment (FPI). This is due to the fact that FDI is a long-term investment in physical assets such as buildings and machines, whereas FPI is a passive investment in stocks and other financial assets that are typically short-term and where investors do not generally influence the management of the enterprise (Al Khouri and Khalik, 2013).

2.1.2 Categories of FDI

According to Zhuang and Griffith (2013), foreign direct investment can be broadly broken down into two categories: greenfield investments and mergers and acquisitions. Greenfield investments make up the majority of foreign direct investments (FDIs) in less developed countries, as reported by UNCTAD (2010). The term "greenfield investment" refers to the process of directly establishing new facilities or expanding existing ones (Zhuang and Griffith, 2013). It is widely acknowledged as a primary route that many multinational corporations take in order to invest in developing countries. It is more favoured, if not the most wanted, by host countries since it has the propensity of creating new jobs, offering technological know-how, and functioning as a linkage to the global economy.

On the other hand, mergers and acquisitions relates to the transfer of existing assets from local firms to foreign firms. This can occur either directly or indirectly. In industrialized countries, many people consider this to be important form of investment. A cross-border merger is when two or more companies from different countries come together to run a business with the same objective, whereas a cross-border acquisition is when a local company hands over control of its assets and operations to a foreign affiliate. Cross-border mergers and acquisitions can be considered to be a form of international business consolidation. According to a survey conducted by the Investment Promotion Agency (IPA) of the United Nations Conference on Trade and Development (UNCTAD), businesses based in industrialized nations are more interested in making greenfield investments than mergers and acquisitions on the African continent (UNCTAD, 2015).

2.1.3 Forms of FDI

FDI can take the form of Inward Direct Investment, which is the value of investments made by non-resident investors in the reporting country, and Outward Direct Investment, which involves the transfer of assets and liabilities by resident investors to other nations. Prior to establishing their enterprises abroad, several managers of multinational corporations may ponder where to site their operations and how to manage them. Literature has given locational judgments little consideration (Buckley, Devinney, and Louviere, 2007). Locational decisions can be influenced in two ways: some businesses would choose to invest in familiar locations, while others would invest less in locales that are nearby, familiar, or have similar markets. Foreign investors seek to invest outside of their native nations for a variety of reasons. These include, but are not limited to, the acquisition of natural resources, inexpensive labour, and access to foreign markets that cannot be obtained domestically.

Again, some schools of thought claim that FDI comes in various forms, with the goals of the FDI flow serving as the primary criterion for differentiation. In their view, there are four types of FDI flows: resource seeking or supply oriented FDI, which seeks the extraction of natural resources such as minerals, oil, and unskilled labour; market seeking or demand oriented FDI, which focuses on meeting the needs of a specific foreign market; strategic asset seeking oriented FDI, which tends to increase ownership advantages while minimizing those of competing firms; and efficiency or rational FDI (Dunning, 2000; Alcantara and Mitsuhashi, 2012).

According to Dunning (2000), resource and market seeking FDIs are most commonly connected with first investments, particularly in developing nations. Further, he said that the pursuit of strategic assets is contingent on the intellectual endowment of host countries, which, when exploited, will be of tremendous benefit to international companies. Once more, he asserts that efficiency-seeking FDI will be beneficial if the foreign company is already producing in at least one country.

In a comparable but distinct approach, Slangen and Beugelsdijk (2010) classify FDI as horizontal and vertical forms. According to their position and description, horizontal FDI is referred to as market-seeking activity, whereas vertical FDI is associated with the extraction of natural resources or the manufacturing of intermediary goods by affiliated companies. Therefore, vertical activity might include both the pursuit of natural resources and of efficiency. These are among the influences on the majority of developed nations. The level of attraction of host countries is determined by their available opportunities. Low-production-cost, resource-rich, market-sized, and/or technologically-advanced countries would attract efficiency-seekers, resource-seekers, market-seekers, and strategic-seekers,

respectively. In addition, Asiedu (2002) suggests that market-seeking FDI largely serves the local market and occasionally includes neighbouring nations, whereas non-market-seeking FDI entails producing domestically and exporting to service the foreign market. In addition, Musila and Sigué (2006) classify FDI into two distinct forms. Per the authors, FDI can be classified as extractive FDI or export-oriented FDI. They refer to the extractive FDI as the form that focuses on extraction of raw material whilst the export-oriented FDI focuses on engaging in secondary activities for export into other economies.

2.1.4 Determinants of FDI

The amount of foreign direct investment (FDI) that flows into a country is influenced by a number of distinct factors. Some schools of thought hold that foreign direct investment (FDI) will flow into economies where there are primarily locational or geographic benefits (Pantelidis and Nikolopoulos, 2008; and Kinda, 2010). According to their point of view, the advantage of the site is in the availability of a variety of elements that, when taken as a whole, improve the ease with which business may be conducted, as well as overall profitability, survival, and growth. The factors that contribute to a location's competitive advantage include, but are not limited to, low-cost labour, natural resources, few or no trade barriers, the availability of natural resource endowments, the cost of transportation, the policies and regulations of the government, the stability of the macro-economy, sociocultural and political factors. These characteristics, in essence, constitute the pull factors that are necessary to attract foreign direct investment inflows (Bokpin et al., 2015).

According to another school of thought, the major determinants of foreign direct investment (FDI) inflows to an economy rest on four key intentions: the quest for resources (that is, access to labour, natural resources, and infrastructural availability); the quest for market (that is, a means of strategically expanding the market size of a firm); the quest for efficiency (that is, to have access to cheap labour in order to reduce the overall cost of production); and the quest to possess assets (i.e. to discover new innovations and developments) (Dunning, 1993: cited in Orji, 2008).

Other scholars have offered different strands of determinants that can affect the influx of FDI into a country, be it a developed or developing country. The majority of these scholars emphasize on the correlation between foreign direct investment and economic expansion, and they place an emphasis on the strength of local institutions and the ability of laws to be enforced (Thiam, 2006; Alam et al., 2013; Majumder and Nag, 2015). According to Neumayer and Spess (2005), the most important factor

in determining the amount of FDI that goes into a country is the existence of bilateral investment treaties (BITs). According to Elkines et al. (2006), bilateral investment treaties have become the most significant international legal framework for the stimulation and direction of foreign direct investment (FDI), and as a result, they have a tendency to draw in more FDI. Although this is debatable, it is important to point out that developing countries have become more appealing to investors since the turn of the twenty-first century as a result of improvements in institutional quality, infrastructural development, the availability of national resources, and the presence of a labour force that is either semi-skilled or skilled.

According to Azam and Lukman (2010), economic variables such as real GDP growth, per capita income, domestic inflation, commercial interest rates, trade openness, exchange rate, and external indebtedness play a significant role in shaping the trends of foreign capital inflows. These factors all contribute to a country's ability to attract and retain FDI. According to their point of view, the factors that determine FDI are country-specific, and as a result, there has been a lot of research done on the topic. Some authors, for example, have conducted research on the factors that determine the amount of foreign direct investment (FDI) that comes into a particular nation. These researchers include Singhania and Gupta (2011) in India; Miskinis and Juozenaite (2015) in Greece, Ireland, and the Netherlands; and Rangkakulnuwat and Paweenawat (2015) in ASEAN countries.

Other schools of thought have also contended on the importance of the role that the government plays in creating an attractive institutional environment for foreign direct investment (FDI). Globerman and Shapiro (2003) and Brewer (1993) both employed a variety of elements that make up a nation's governance infrastructure to explain patterns of foreign direct investment (FDI). There are a number of research that can be found that discuss the factors that influence foreign direct investment (FDI), however not one of these studies has identified the factors that actually drive FDI (Kok and Ersoy, 2009: Cite in Masron, 2017). As a result, the amount of foreign direct investment (FDI) that a country receives is determined by a large number of factors, some of which may be important for one nation but unimportant for another.

2.1.5 Global Trends of FDI

During the past four decades, foreign direct investment (FDI) flows have fluctuated according to a variety of patterns. This is due to the fact that many less developed economies have had more rapid economic expansion (Buchanan, Le, and Rishi, 2012). Since the late 1980s, there has been a rapid but

erratic flow of foreign direct investment all over the world (Chakrabarti, 2001). In 1998, foreign direct investment (FDI) flows increased by 39% globally, reaching a total of $844 billion US dollars. In the year 2000, it had further climbed to a total of US$ 1,491 billion, marking a huge growth of 49.5% from the previous year. After the global economic crisis that began in 2007, worldwide FDI flows fell by a considerable amount; however, in 2010, they rebounded somewhat and increased to a total of $1.24 trillion.

Flows have usually increased since this period, but they have not been able to rise to the average level they had reached before to the crisis, despite the fact that industrial output had returned to normal. Approximately thirty percent of the overall foreign direct investment (FDI) inflows were earnings that were reinvested as a result of higher profits at foreign affiliates, particularly in developing nations. In spite of the widespread mayhem, foreign direct investment (FDI) in 2011 reached a new all-time high of $1.5 trillion, an increase of 16% from the year before the financial crisis. This was partially the result of an increase in FDI flows to transition economies and emerging countries, which together accounted for more than half of the total FDI inflows around the world.

Recently, there has been a significant shift in the global context regarding the principal recipients of foreign direct investment, which has occurred from wealthy countries to developing and transition economies. For example, emerging economies for the first time in 2010 received close to half of global inflows while at the same time having major outflows that were mostly directed to the South. This occurred despite the fact that developing economies also experienced significant outflows. For instance, Foreign Direct Investment (FDI) to poor nations rose by around 21% in 2010 and accounted for 29% of all FDI. In addition, more than ten of the top twenty countries that received the most foreign direct investment in 2010 were classified as developing countries. Again, taking a look at a trend that occurred much more recently reveals that the cumulative foreign direct investment (FDI) inflow for the period 2017-2018 for developed economies and emerging economies shows 47% and 53%, respectively. In addition, foreign direct investment (FDI) numbers for 2018 show that emerging and transition economies received 57% of the total amount, while developed economies received only 43% (UNCTAD WIR Database, 2019). This demonstrates the growing significance of developing countries and transition economies to the economy of the world as a whole.

Compared to the previous year (2018), which recorded a total of US$1.41 trillion, global FDI fell slightly to a new low of US$1.39 trillion in 2019. This was a fall of 1% from the previous year's total. This was in the context of deteriorating performance in macroeconomic indicators and policy

uncertainties for investors, particularly heightened trade tensions. In the year 2020, the global FDI drastically declined from the prior year figure of US$1.39 trillion to a new low of US$929 billion. This was predominantly caused be the emergence of the Covid-19 pandemic and the consequent closure of most cross-border activities and international trade. However, in 2021, the global FDI increased to US$1.65 trillion from the previous year figure of US$929 billion, indicating a significant rebound of global FDI that exceed the pre-COVID-19 level.

2.1.6 Industrialization

Industrialization is basically the process of shifting the economic base of a country or region from one based on agriculture or primary activities to one that is more dependent on manufacturing. It is a term that is used to refer to the expansion of manufacturing industries and decline in primary industries like fisheries and agriculture, typically as a result of industrial and trade policies to achieve economic and structural transformation (Bjorvatn and Coniglio, 2012; Dobrinsky, 2009; Harrison and Rodrguez-Clare, 2009). Mostly it argued that the change towards industrialization will not be successful without the implementation of mechanized technologies of mass production. Thus, an investments in capital and intermediate goods are frequently correlated with the expansion of manufacturing industries (Kang and Lee, 2011).

In the earliest stages of economic development, countries often devote their resources toward the expansion of manufacturing industries in order to drive the structural change of their economies in order to achieve long-term growth (Kang and Lee, 2011). In subsequent stages, however, the rate of industrialization slows, a phenomenon known as de-industrialization. As a policy objective, industrialization is essential for keeping policymakers focused on how to allocate resources across diverse sectors (Harrison and Rodrguez-Clare, 2009). Industrialization can be spurred by a confluence of causative elements, some of which include government policies, technologies that reduce the need for manual labour, the aspirations of business people, and consumer demand for goods and services.

2.1.7 Determinants of Industrialization

2.1.7.1 Internal and External Demand

Manufacturing expansion and internal demand are positively correlated, hence larger countries tend to have a higher manufacturing share. As per-capita incomes rise, manufacturing's share of national income rises. Small countries are frequently open, therefore economic activity in developed economies

could affect growth prospects in developing countries, especially export demand. Changes in the former economies' GDP could affect the latter's industrial activity. Guadagno (2012), using Cornwall's (1977) model to generate a manufacturing growth equation for emerging nations, finds that domestic market size and trade openness are consistent industrialization factors.

2.1.7.2 Trade Openness

Outward-looking industrial strategy allows access to huge markets and expanding demand, encouraging big-scale industrialization programmes (case of East Asian New Industrialized Economies such as Hong Kong, Singapore, Taiwan and Korea). Trade liberalization boosts industry growth by allowing access to imported inputs at free trade prices, technology, and a competitive exchange rate. Closer integration with the world economy in the second half of the 20th century was connected with stronger economic growth, disproving forecasts of stagnationary global factors holding back their material progress (Weiss 2002).

FDI, especially in manufacturing, can boost growth, exports, and industrialization by transferring money, technology, management, dependable financing, and marketing tactics. In a closed or protected economy, companies will be less aware of international technology change and less motivated to adopt best practices. Fostering outmoded technology and high-cost activities reduces FDI and slows market access, slowing industrialization. Babatunde (2009) finds that trade liberalization can boost export performance, albeit marginally and indirectly, in Sub-Saharan Africa (SSA).

Seetanah and Khadaroo (2007) concluded that FDI is relevant in explaining economic success in these nations, though to a lower extent than other sources of capital. This evidence does not prove that outward-looking trade strategies and FDI liberalisation are the best policies for all developing countries at all times. State policy action in support of infant industry seems unavoidable because it protects against harsh competition, especially during early industrialization.

In Taiwan and Korea, import-substitution strategies (quotas, tariffs, export taxes, etc.) have not disappeared with export-intensive businesses. State incentives encouraged multinational capital to climb the industrial ladder (Stein 1995). Shafeddin (2005) proves that trade liberalisation has contributed to de-industrialization of low-income nations that have not adopted selective protection laws, particularly Sub-Sahara African countries. Industrialization exacerbated the economy's fragility, especially the manufacturing sector's reliance on imports. Agosin and Mayer (2000) identified different effects of FDI on domestic investments in Africa, Asia, and Latin America. Ivory Coast, Ghana, and

Senegal are attracting FDI, but Central African Republic, Nigeria, Sierra Leone, and Zimbabwe are not. FDI are not always favourable, and uncomplicated strategies are unlikely to be ideal.

2.1.7.3 Macro-economic Stability

Stability of the macro environment is often conducive to growth since it encourages enterprises to operate rationally. In a setting of low inflation, appropriate deficit and public debt, risk-averse investment behaviour is mitigated and access to financial and capital markets is facilitated. This is especially essential in African nations where entrepreneurship may be scarce (Rogoff and Reinhart, 2003).

On the other hand, keeping stable exchange rates has a significant impact on long-term growth. In fact, limiting exchange rate discrepancies could safeguard exporters from an overvaluation phenomenon that impairs competitiveness and importers from a devaluation phenomenon that hurts investment and purchasing programmes. Moreover, currency rate volatility makes it difficult and expensive for developing countries, particularly small and medium-sized businesses, to hedge their exchange rate risks.

Using inflation and terms of trade as extra exogenous factors in a panel model explaining economic development in the manufacturing sector, Rodrik (2008) discovers a negative and statistically significant link between growth and inflation in developing nations. In a similar manner, Greenwald and Stiglitz (2006) demonstrate that in developing nations, low exchange rates assist export industries such as manufacturing compete, particularly those with larger learning elasticities and more learning externalities. This is how many nations have been able to lower their real exchange rate over an extended period of time while still fostering economic growth.

2.1.7.4 Human Capital

Human capital development in the form of a sufficient number of technically and scientifically competent workers enables businesses to meet rising demand and advance industrially. Creating immovable national assets, particularly through education, training, and healthcare expenditures, could create the foundation for a competitive industrial sector and increase the allure of investments. Increasing government support for education, enhancing vocational training, and ensuring access to healthcare are, thus, essential for any type of industry. Zelleke et al. (2013), utilising a growth accounting approach to identify the sources of economic growth and relying on the conceptual frameworks of Pritchett (2001) and Weil (2013), demonstrate that human capital has positive effects

in SSA countries (they account for 22% of real GDP) but to a much lesser extent than in high-income countries.

2.1.7.5 Governance

The presence of institutions able to guarantee greater rule enforcement, transparency, the lack of corruption, and government stability could enhance the business climate and encourage entrepreneurship. In contrast, the existence of severe governance inadequacies could impede the development of a robust industrial sector and complicate the implementation of an effective industrial policy (Williamson, 2000).

On the other hand, inconvenient government actions could lead to distortions and economic inefficiencies. Maintaining rigid norms, such as extensive labour market regulation, could impede market efficiency and discourage industrialization initiatives. Using a cross-country regression model, Clague et al. (1997) demonstrate that disparities between nations in property relations and contract enforcement contribute to high transaction costs, which have a detrimental effect on economic growth. Using a similar structural regression model as Sachs and Warner (1998) for analyzing the sources of economic growth in Africa, Ng and Yeats (1999) discovered that governance regulations (plus national trade) explain over 60 percent of the variance in certain measures of economic performance; thus, a country's national policies determine its rate of development, industrialization, and growth.

2.1.7.6 Financial Development

The presence of financial institutions that ensure more efficient resource allocation could influence the industrialization process. Specifically, the existence of an effective banking system that ensures attentive funding to businesses, especially small and medium-sized businesses, strengthens domestic entrepreneurial skills (Liedholm and Mead, 2013). In addition, the operation of financial markets and the capacity of businesses to secure enough funding should receive considerable consideration. A well-developed system of financial institutions could easily transmit cash from savers to investors and monitor the performance of investments. Using a Vector autoregression (VAR) framework based on the theory of cointegration and error-correction representation of cointegrated variables, Ghirmay (2004) provides evidence of the existence of a long-run relationship between financial development and economic growth and industrial development in almost all (12 out of 13) SSA countries.

2.1.8 De-industrialization

The term deindustrialization primarily refers to a drop in the industrial activities or the industrial capacity of an economy or region. The United Nations Industrial Development Organization (UNIDO) (2013) defines de-industrialization as a long-term drop in manufacturing value contributed relative to other sectors. Thus, essentially, deindustrialization is an inevitable consequence of the shift from manufacturing to services in industrialized economies. Deindustrialization as a result of economic vitality presupposes that industrialization has already exhausted the period of expansion and is in its last stages (Cruz, 2015). It also presupposes that the services sector has developed to the point where it can absorb new people in high-quality jobs. In developed economies, deindustrialization often happens after industrialization has increased productivity level, dispersed its technological capabilities, and consolidated the local market (UNCTAD, 2016).

Some scholars argue that de-industrialization is a natural outcome of economic development and often pertains to industrialized economies (Cowie, et al., 2003; Kang & Lee, 2011). According to Felipe and Mehta (2016), even though deindustrialization is often pertains to advanced and industrialized economies to describe the reduction in manufacturing activities and jobs which began in the 1960s, most developing and emerging economies have also experienced substantial deindustrialization, particularly since the 1980s. One school of thought argue that the majority of the developing and emerging economies started to experience de-industrialization during their transition to developed economies (Bernard, et al., 2017). Per the authors, these countries began at per capita income levels that were significantly lower than when advanced economies began deindustrialization. A phenomenon that is commonly referred to as 'premature deindustrialization' (Rodrik, 2016).

2.2 Theoretical Review of Literature

This section covers the theoretical review where the theory underpinning the study is discussed. Given the broad objective of the study which seeks to establish the impact of FDI on industrialization in West Africa, the study employs the absorptive capacity theory as the most suitable theory to support the study. The absorptive capacity theory states that in order for host countries to reap the benefits of FDI, they must have the requisite environment in terms of institutional and infrastructure resources. If the host country lacks or has insufficient institutional and infrastructure resources, it will be unable to put the FDI to good use, thereby limiting the economic benefits that the FDI may otherwise provide. Research by Durham (2004) shows that a country's ability to absorb FDI rest on the

absorptive capacity of the host country. The theory emphasize that not all countries that receive FDI flows will reap the benefits of increased economic growth the consequent industrialization. The benefits of FDI may not materialize for the host country if necessary internal mechanisms are lacking. Agbloyor et al. (2016) discovered evidence in favour of the absorptive capacity theory, which states that the positive effect of FDI on economic growth and industrialization depends on the conditions of the host country.

Allansson et al. (2017) note that activities that hamper the absorptive capacity of host countries put them at the disadvantageous position to benefiting from FDI. According to the authors, most developing countries are not well positioned to realize benefits of FDI to the extent that it can propel them to industrialized economies since most of them are still have insufficient institutional and financial resources. Predominantly, most countries in the West African sub-region are with the developing and transition economy class which make them uninsulated from this argument by the authors. Based on the argument advanced by the absorptive capacity theory and devastating consequence that lack or inadequacy of requisite resources and institutions can have on countries ability to yielding the best from FDI, the study contends that FDI may not significantly impact on industrialization in West Africa.

2.3 Empirical Review on FDI and Industrialization

There is a significant body of research that has been conducted on how industrialization is affected by the arrival of investment from overseas, commonly referred to as foreign direct investment (FDI). In order to provide a comprehensive overview of this discipline, this section the empirical outcomes of several significant publications that have been published in this domain. It is important to emphasize that whereas some of the studies have reported consistent outcomes, others have reported inconsistent results.

Chuang and Hsu (2004) looked into the connection between foreign direct investment, commerce, and the amount of efficiency that spills over from China's manufacturing sector. They discovered that the presence of foreign ownership has a beneficial effect on the productivity of domestic companies. Furthermore, the Chinese economy has profited from access to new information and technology, both of which are propellants of its output and expanding share of global commerce. This access has allowed the Chinese economy to gain a larger proportion of global trade. In a similar vein, increased participation of multinational corporations in the economy of the host nation may be primarily

detrimental to the domestic market as a result of increased competition; however, once a certain threshold value is reached, the positive aspects of FDI outweigh the negative aspects of the situation.

Further, Kang and Lee (2011) explored the influence of FDI on industrialization using the proportion of manufacturing jobs in total employment. They discovered that while inbound FDI promotes industrialization, outward FDI demonstrates the opposite for OECD nations. Likewise, Daiyue et al. (2012) investigated the function of foreign direct investment (FDI) in China's east, middle, and western regions during the process of regional industrialization. According to their findings, foreign direct investment had the most significant positive effect on the new industrialization process across all three locations that were investigated. Additionally, there is a strong bilateral Granger cause between foreign direct investment (FDI) and the process of new industrialization in the middle region, whereas in the east and west regions, there is only a major unilateral Granger cause. This idea of FDI as a promotional tool was supported by Umer and Alam (2013) as well as Ojo et al. (2017).

In their study on the influence of foreign direct investment (FDI) on the growth of domestic industrial companies in the Republic of Ireland, Barrios, Gorg, and Strobl (2005) examined a data set that included the years 1972 through 2000. They did this by calculating the employment in foreign owned factories and then dividing that number by the overall employment in the industry. This model was used to estimate the effect that FDI has on the formation of new businesses. According to their findings, foreign direct investment (FDI) can have a favourable impact on the growth of local enterprises; hence, the bigger the volume of capital inflows, the more effective the local firms would be. Similar findings can be seen in Blomstrom (1986), which examines data from 1965 to 1970. According to the findings of the study, a rise in the total amount of foreign direct investment (FDI) in a host country will lead to an increase in the total number of businesses operating inside that economy. To put it another way, there are fewer companies competing in the industry before the entrance of the multinational organization.

In a similar manner, Sharma's (1984) research into countries in Southeast and East Asia discovered proof showing that these countries witnessed a surge in economic strength during the same period where there was a substantially large inflow of FDI into the host country. This evidence was found to coincide with the period in which there was a substantially large inflow of FDI into the host country. This spike in economic performance was able to push these countries into a whole new group that the researcher referred to as "newly industrialized countries." This group was able to push these

countries into a whole new group because they were able to. Busse and Hefecker (2007) find that the economic activities of multinational corporations are significantly impacted by factors such as internal and external conflict, law and order, the quality of bureaucracy, and the stability of the government. Their research was conducted using a sample of 83 developing countries over the period of time from 1984 to 2003. An analysis conducted by Lui (2002) on the impacts of foreign direct investment (FDI) on the process of industrialization in China reveals that FDI in enterprises located within the Shenzhen Special Economic Zone had a favourable impact on the value added that was produced by the increases in those firms.

Unlike the studies above that have reported that FDI have favourable effect on industrialization, there is a strand of research that have also reported otherwise. In their study, Fillat and Woerz (2011) analyzed the impact of foreign direct investment (FDI) on the growth of productivity in 35 different countries. As a result of their research, the authors discovered that the crowding-out effect of FDI on domestic investment can be seen in some of these countries. Thus, inhibiting industrialization of local firms.

In related fashion, Kaya (2010) examined the effects of globalization on industrialization from a research standpoint. The author looks at data from sixty-four different developing nations during the course of the years 1980 to 2003. According to the findings, foreign direct investment from the outside has a detrimental impact on the process of industrialization. That is to say, research indicates that nations that had a higher level of foreign investments also had a lower level of industrialization. Kaya (2010) further demonstrated that foreign direct investment (FDI) from one developing country to another did not have a major impact on the manufacturing sector in either country. He demonstrated that fears about issues related to deindustrialization were unjustified despite the fact that investors from emerging nations were investing in other countries.

According to the findings of Gui-diby and Renard's (2015) researched on the part that foreign direct investment (FDI) played in the industrialization process of 47 African countries, FDI had a negligible relationship with industrialization. This conclusion was reached based on the findings of their analysis. In their investigation, they used a regression method called feasible least square on a collection of data spanning the years 1980 and 2009. Their findings were a significant change from the conclusions of earlier studies, the majority of which had indicated either a positive or a negative association between the two variables. According to them, the primary reason for this finding is

because African governments have policies that are unsuccessful in luring the manufacturing sector that is looking for FDI.

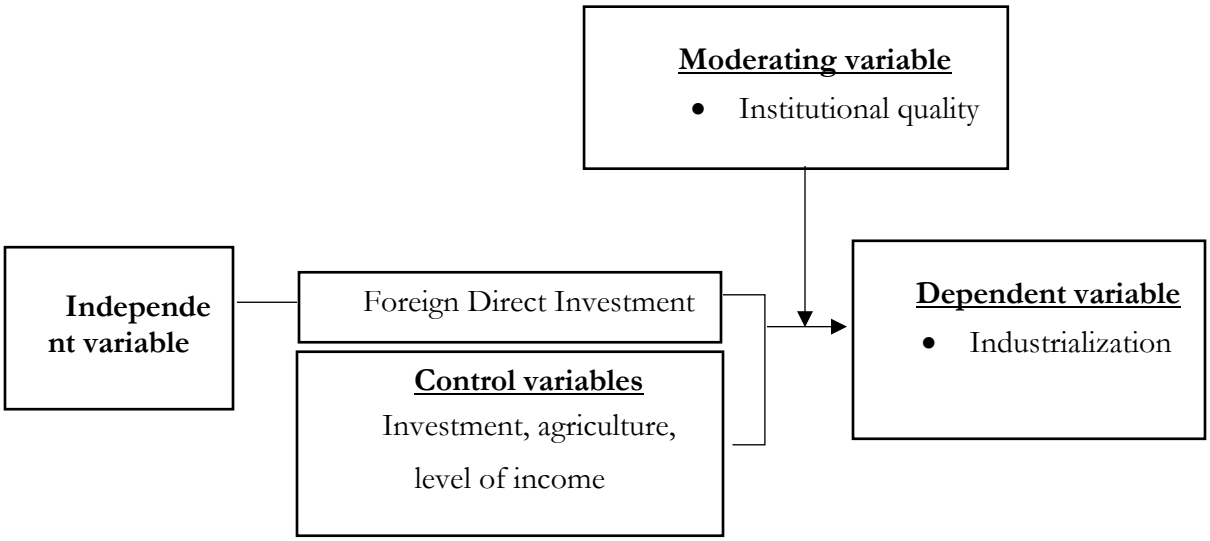
Relatedly, Megbowon et al. (2019) made a contribution to the discussion by analyzing the influence of China's external FDI on the process of industrialization in sub-Saharan Africa. Their findings indicate that foreign direct investment (FDI) from China into the SSA region is beneficial but has a negligible impact on the industrialization of the region. This indicates that FDI from China is not adequate to advance industrialization in SSA. The findings of this study are identical to those of Kaya (2010) for 64 developing economies.

Additionally, Alfaro and Rodriguez-Claire (2004) use data from individual companies to analyze the influence of spillovers caused by the introduction of multinational firms. Their research focused on the countries of Brazil, Chile, and Venezuela. The authors were unable to obtain relevant outcomes that were statistically significant for the effects of horizontal spillovers that were caused by an increase in FDI. On the other hand, they discovered evidence that supported backward links. Rodriguez-Claire (1996) conducted research to investigate the impact that FDI has on employment levels within an economy. According to what he discovered, the existence of backward and forward connections is contingent upon the degree to which multinational corporations make use of local goods in the manufacturing of their final products.

2.4 Conceptual Framework

The conceptual framework tries to depict the relationship between the main variables of the study which are principally the dependent and independent variables. Since the purpose of the study is to explore the impact of FDI inflows on industrialization in West Africa, the conceptual model based on the extensive review of relevant literature on the theme of the study is provided in Figure 2.1.

Figure 2. 1: Conceptual framework



Source: Author (2022)

2.5 Chapter Conclusion

The chapter has presented the review of relevant literature on the subject of investigation. The chapter began with a review of literature on the conceptual aspects of the subject being investigated. Here the discussion was provided to provide in-depth understanding of the concepts of FDI and industrialization as well as other issues that are deemed relevant to thoroughly present an understanding of the key concepts of the study. Thereafter, review was provided on the theoretical underpinning of the study where the main theory supporting the study was discussed. Here, the absorptive capacity theory took the centre stage where in-depth discussion was provided on the theory and how it suitably links to the current study. Subsequently, the empirical discussion was done to highlight the major outcomes from prior empirical investigations that are related to the current study. The empirical discussions brought to light some of the interesting outcomes from various studies, highlighting those that are revealed consistent outcomes and the ones that are reported inconsistent outcomes. The conceptual framework was also formulated in following the understanding of the key concepts and the major variables employed in the study to provide a pictorial view of how the variables are interrelated.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter presents the research methodology for the study. The chapter is composed of different sections. It begins with the research design in the first section. The detailed composition comprises among others, the research design used in conducting the study, population and sampling technique, as well as data and sources of data. It also presents the technique of data analysis and the estimation technique, together with the measurement and justification for variables.

3.1 Research Design

The study employs the explanatory research method to investigate how FDI influences industrialization. The choice of employing the explanatory research is because the study tries to establish a relationship between different constructs as argued by Miller and Salkind (2002). Additionally, the rationale for the use of the explanatory research method is premised on the adoption of the same method in similar prior studies such as Gui-Diby and Renard (2015) and Müller (2021). Further, the study adopts the quantitative approach to investigate the link between FDI and industrialization. The quantitative approach is adopted to enable the researcher systematically analyze the relationship between different variables using quantitative techniques as emphasized by Creswell and Creswell (2017). Moreover, the quantitative approach is deemed as more appropriate for the study since it employs numerical data to address the research objectives.

3.2 Population, Sampling, and Sample

The population of the study is the all the countries in West Africa. The countries that make up this population are 16 elements. Of this population, fifteen elements are sampled. The study adopts the purposive sampling technique to select the elements. The choice of adopting purposive sampling technique is to ensure that the elements selected have data for all the variables in the respective years to ensure a balanced panel data is obtained.

3.3 Data and Data Sources

The study employs secondary data to address the research objectives. Specifically, the data are panel data. The panel data are employed for the study since it has both cross-sectional and time-series properties that provide it with more degrees of freedom and sample variability for an efficient econometric estimation (Hsiao, 2007). The data are yearly observations of West African countries spanning the eleven-year period from 2010 to 2020. The data are obtained from the World Bank Development Indicators Database and the World Governance Indicators database. Table 3.1 below provides a summary of the data on the variables and their sources.

Table 3. 1: Summary of data sources

Variable	Measurement	Code	Source
Industrialization	Manufacturing value added as percentage of GDP	INDU	World Development Indicators (2022)
Foreign Direct Investment	Net FDI inflows as percentage of GDP	FDI	World Development Indicators (2022)
Investment	Gross capital formation as percentage of GDP	INV	World Development Indicators (2022)
Agriculture	Agriculture value added as a percentage of GDP	AGRI	World Development Indicators (2022)
Level of Income	Natural logarithm of GDP per capita at purchasing power parity (2017 constant prices)	GCAP	World Development Indicators (2022)
Inflation	Annual rate (%) of consumer price inflation	INF	World Development indicators (2022)
Institutional quality	Simple average of the six institutional governance indicators as used by Kaufmann et al. (2005)	INSTQ	World Governance Indicators (2022)

3.4 Data Analysis

Data obtained for that study are taken through the necessary diagnostics checks. Subsequent to the diagnostics tests, the data are analyzed by means of regression analysis. To estimate the relationship between FDI and industrialization, there is a possibility of endogeneity problem as FDI may be correlated with some factors contained in the error term, which in turn might affect industrialization. The Generalized Method of Moment (GMM) can address this endogeneity problem. According to Ullah et al. (2018) the GMM model controls for endogeneity by internally transforming the data and by including lagged values of the dependent variable. Hence, the twostep system GMM regression is employed to estimate the FDI-industrialization link in order to address the possibility of endogeneity problem. The analysis is done with the help of the Stata statistical software.

3.5 Estimation Strategy

The study employs the GMM technique to estimate the parameters. It is important to note that although the two-stage least squares (2SLS) and three-stage (3SLS) can be adopted in a simultaneous equations framework to estimate the parameters, the GMM is chosen since it is deemed as more appropriate to estimate the parameters. The GMM estimation strategy was developed by Holtz-Eakin et al. (1990), Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998). The two main types of the GMM estimators are the difference GMM estimator and the systems GMM estimator. The difference GMM estimator has is reported to be biased since the use of lagged values of predictor variables as instruments for the regression estimation in differences is inappropriate, especially when the predictor variables are persistent over the period under consideration. Moreover, the difference GMM approach excludes the cross-sectional-specific effect. The system GMM is known to have the ability to address these shortfalls. The system GMM estimator combines the regression in differences with the regression in levels. As in the difference GMM, lagged levels of the explanatory variables are used as instruments for the regression in differences. Again, the instruments for the regression in levels are the lagged differences of the corresponding variables.

There are two classes of the system GMM estimator; the one-step estimation and the twostep estimation. The study employs the twostep estimator with Windmeijer (2005) corrected standard errors because this is asymptotically more efficient than the one-step estimator. The twostep GMM estimator is suitable and particularly relevant for this study for several reasons. First, it is designed for situations with short time periods and many individuals (Roodman, 2006). Second, the GMM

approach allows us to treat growth as a dynamic process, thus accounting explicitly for the possibility that previous growth may influence future growth. Third, the use of the twostep system GMM approach allows for the control of endogeneity of the explanatory variables.

To check for the consistency of the estimates, the study employs two specification tests: the Sargan and Hansen tests of overidentification restrictions and the Arellano and Bond test for first and second-order serial correlation in the error term. The Sargan/Hansen test measures the validity of the instruments by analyzing sample analogues of the moment conditions used in the estimation. By construction, the error term may be serially correlated in the first order. However, second-order serial correlation is a sign of misspecification. From Table 4.5 in following chapter (i.e. chapter 4), the Arellano–Bond first (AR1) and second (AR2)-order autocorrelation tests revealed the absence of serial correlation in the model. Also, the Hansen and Sargan tests of over-identifcation restrictions established the absence of correlation between the instruments and the disturbance terms. These tests are satisfactory and hence, confirm the robustness of the inferences generated by this study.

3.6 Endogeneity Issue and how it was Addressed

The researcher adopts the two-step system GMM estimator approach, which was suggested by Arellano and Bover (1995) and Blundell and Bond (2001), in order to deal with the endogeneity issue. This estimator makes use of the dynamic effect by supplementing the explanatory variable(s) with a lagging dependent variable. In addition, the two-step system GMM allows for the construction of instruments for endogenous variables. To be more specific, in order to account for all possible endogenous factors, the two step GMM allows the researcher to make use of their historical values as the appropriate instruments (Vallascas and Hagendorff, 2013). Calculating the Hansen/Sargan test is one way to examine the reliability of the multiple lags as an instrument (Pathan and Faff, 2013; Andres and Vallelado, 2008). Hence, the Hansen/Sargan test are employed, the results of which prove absence of correlation between the instruments and the disturbance terms. Thus, reinforcing the reliability of the lags as instruments. Both first and second degree serial correlation can be measured using the AR(1) and AR(2). There is a possibility of correlation between the residuals of the first differences AR(1), but there shouldn't be any correlation in the second differences AR(2) (Cameron and Trivedi, 2009). The results of both (AR1) and (AR2) tests reveals the absence of serial correlation in the model.

3.7 Econometric Model

Following extant literature, the study adopts an econometric model from prior studies such as Mihalache (2011), Li et al. (2017), and Ullah et al. (2018) and modified to fit the current study as follows.

$$INDU_{it} = \beta_0 INDU_{it-1} + \beta_1 FDI_{it} + \beta_2 INV_{it} + \beta_3 AGR_{it} + \beta_4 lnGCAP_{it} + \beta_5 INF_{it} + e_{it} \ldots (1)$$

On introduction of the interacting term, the model is modified to show as:

$$INDU_{it} = \beta_0 INDU_{it-1} + \beta_1 FDI_{it} + \beta_2 INV_{it} + \beta_3 AGR_{it} + \beta_4 lnGCAP_{it} + \beta_5 INF_{it} + \beta_5 INSTQ_{it} + \beta_5 (INSTQ * FDI)_{it} + e_{it}$$

Where:

Subscript i denotes country (i=1,2,3,4…….n)

Subscript t denotes time period (t=2011, 2012, 2013,……2020)

α_i denotes the country-specific effect

μ_i denotes unobserved time-specific effects

e_{it} denotes the idiosyncratic or random error

β_0 - β_4 denote the parameters to be estimated (regression coefficients)

INDU denotes the measurement for industrialization

FDI denotes the measurement of foreign direct investment

INV denotes the measurement for investment

AGR denotes the measurement for agriculture

GCAP denotes the measure for level of income

INF denotes the measurement for inflation

INSTQ denotes the measurement for institutional quality

INSTQ*FDI denotes the interaction term for institutional quality and FDI.

3.8 Measurement and Justification for Variables

3.8.1 Dependent variable

- ***Industrialization***: From extant literature, two indicators are mostly used to proxy industrialization. These are value-added of the manufacturing sector as a percentage of GDP

(Dodzin & Vamvakidis, 2004; Gui-Diby & Renard, 2015; Ngouhouo & Ewane, 2020) and the share of employment in the manufacturing sector (Kaya, 2010; Kang & Lee, 2011). Considering the unavailability of data on the share of employment in the manufacturing sector in West Africa, the value-added of the manufacturing sector is used to proxy industrialization.

3.8.2 Independent variable

- *Foreign Direct Investment*: The variable foreign direct investment will be proxied by the natural logarithm of net foreign direct investment inflows as used by Gui-Diby and Renard (2015), Kang and Lee (2011), and Kaya (2010).

3.8.3 Control variables

A set of control variables are included to mitigate their confounding effect on the main variables of interest. These include investment, agriculture, and level of income. These control variables have been extensively applied in similar prior studies.

- *Investment*: Investment is included in the model as one of the controls and it is proxied by gross capital formation as a percentage of GDP at current prices, as used by Gui-Diby and Renard (2015).
- *Agriculture*: Because of the heavy reliance of West African countries on the agricultural sector, agriculture will be included in the model as one of the controls it is proxied by the value-added of the agricultural sector as a percentage of GDP. Kang and Lee (2011) and Gui-Diby and Renard (2015) used the agriculture indicator in their models as a control indicator.
- *Level of Income/Household income*: Household income is included in the model as one of the controls. Per capita GDP is used because it can be used as a means of observing the changes in demand in relation to increases in national income and the impact it has on industrialization. For the purpose of this study, the natural logarithm of GDP per capita at Purchasing Power Parity in 2017 constant prices is used to proxy household income. Some studies such as Dong et al. (2011) and Kang and Lee (2011) have proxied levels of household income using GDP per capita.
- *Inflation rate:* The rate of inflation provides a picture of the economic instability and uncertainty impacts. It is expected that there will be a diminishing effect on industrialization when general prices go up frequently because higher prices do not only limit the ability of households to consume manufactured goods but also add increases production cost, leading to higher cost of goods produced by the manufacturing sector. This variable is chosen in line

with the some prior authors (Freeman and Yerger 2000; Enu and Havi 2014) as a control variable to estimate the relationship between FDI and industrialization. It is proxy as the rate of consumer price inflation as reported by the World Bank in the World Development Indicators.

3.8.4 Moderating variable

- *Institutional quality*: Institutional quality has a plays a major role in affecting the pace of development and which has a bearing in industrialization. Hence, institutional quality is introduced to determine if it plays a major role in the link between FDI and industrialization. In this regard, an interaction term (fdi*inst.) is introduced in the model. The World Bank Governance Indicators (WBGI) looks at institutional quality from six key indicators, namely, voice and accountability; political instability and violence; government effectiveness; regulatory quality; rule of law; and control of corruption (Kaufmann et al., 2005). The study employs the simple average of these six indicators as the proxy for institutional quality.

3.9 Chapter Conclusion

The chapter has presented the research methodology and data employed to conduct the study. The chapter addressed the research design employed the carry out the study where it laid emphasis on the explanatory research method and the quantitative approach. The chapter also looked at the population, the sampling technique and the sample size employed. It then focused on presenting the data and sources of data for the study. Further to these, the data analysis procedure and estimation strategy, together with the model specification employed for the study were elucidated. The chapter lastly looked at the measurement of variables as well as the justification for the use of the variables.

CHAPTER 4: ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter presents the analysis and discussions. It is structured into four different sections. After the introduction in the first section, the second section looks at the preliminary analysis where the descriptive analysis and the correlation analysis are presented. The third section gives and detailed analysis and discussions on the empirical estimation where objectives one and two are addressed. Section four presents the analysis on the third objective of the study which looks at the trend of FDI inflows into West Africa. Lastly, the chapter shows the chapter conclusion in section five.

4.2 Preliminary Analysis

4.2.1 Descriptive Statistics

Table 4.1 presents the results of the descriptive statistics of the variables employed in the study. The table shows that mean industrialization (INDU) is 8.753. The mean INDU gives indication that gives indication the on average the West African sub-region have had its manufacturing value added of GDP to be about 9% over the 11 year period from 2010 to 2020. The mean FDI is 4.204, meaning on average the net FDI flow in proportion to GDP to the West African region has been around 4.2%. The mean AGR is found to be 25.931, meaning the countries in the West African sub-region have had an average of about 26% of value added of the agricultural sector to GDP. It is observed that the mean INV is 24.113, indicating the average gross capital formation in proportion to GDP is about 24% for the sub-region over the period. The mean INF is 4.403, meaning the rate of consumer price inflation in the sub-region has been around 4.4% over the period. The mean INSTQ is -0.601, which means that when put together, the countries in the sub-region report an average of negative 0.6 in terms of the six indices for assessing the quality of their institutions.

From Table 4.1, it is noted that the variables fairly show appropriate minimum and maximum values. An observation of the result on lowest and highest values of the variables presented in Table 4.1 shows there are no extreme outliers in the dataset on the respective variables. The observations on each of the variables is 165, indicating none of the variables has missing data in any of the respective years.

Table 4. 1: Descriptive statistics

Variables	Mean	Std. Dev.	Min	Max	Observations
INDU	8.753	3.507	1.533	17.380	165
FDI	4.204	4.645	-11.199	32.301	165
AGR	25.931	12.135	4.633	60.611	165
INV	24.113	8.997	6.699	52.670	165
lnGCAP	7.921	0.502	6.928	8.878	165
INF	4.403	5.018	-3.233	21.350	165
INSTQ	-0.601	0.363	-1.495	0.116	165

Note: INDU is industrialization, FDI is foreign direct investment, AGR is agriculture, INV is investment, lnGCAP is natural log of GDP per capita, INF is inflation, INSTQ is institutional quality.

Source: Research data (2022)

4.2.2 Correlation Analysis

The results of the correlation analysis is presented in Table 4.2. Per the results, it is seen that the variable FDI, AGR, INV, and INF are negatively correlated with INDU whilst the variables lnGCAP and INSTQ are positively correlated with INDU. It is also evident that all the pairs of predictor variables have low to moderate correlations. The highest correlation is found between the pair AGR and lnGCAP which has a correlation coefficient of 0.653. According to Kennedy (2008), the correlation coefficient of a set of predictor variables ought to be more than 0.70 to trigger a problem of multicollinearity. Thus, the results provide indication that multicollinearity is not a cause for concern in the dataset for the predictor variables employed in the study.

It is important to note that the results of the correlation analysis only provide an indication of mere association between the pairs of variables and not the effect or the numerical response. Thus, to establish the actual effect or numerical response between the independent and dependent variables, there is the need for further estimation. To do this, the regression estimation is performed. Specifically, the twostep system GMM regression is performed to establish the effect and the results is presented in the subsequent section.

Table 4. 2: Correlation matrix

Variables	INDU	FDI	AGR	INV	lnGCAP	INF	INSTQ
INDU	1.000						
FDI	-0.410*	1.000					
	(0.000)						
AGR	-0.440*	0.146*	1.000				
	(0.000)	(0.061)					
INV	-0.148*	0.467*	-0.433*	1.000			
	(0.058)	(0.000)	(0.000)				
lnGCAP	0.101*	-0.078*	-0.653*	0.293*	1.000		
	(0.195)	(0.320)	(0.000)	(0.000)			
INF	-0.213*	0.174*	0.093*	-0.158*	0.140*	1.000	
	(0.006)	(0.026)	(0.235)	(0.042)	(0.073)		
INSTQ	0.151*	0.053*	-0.269*	0.159*	0.252*	-0.141*	1.000
	(0.053)	(0.497)	(0.000)	(0.042)	(0.001)	(0.071)	

**** p<0.01, ** p<0.05, * p<0.1*

Note: INDU is industrialization, FDI is foreign direct investment, AGR is agriculture, INV is investment, lnGCAP is natural log of GDP per capita, INF is inflation, INSTQ is institutional quality.

Source: Research data (2022)

4.3 Empirical Results and Discussions

The empirical analysis of the study are based on the baseline estimation (using pooled OLS and random effects estimation) and the twostep system GMM technique. The baseline estimations which include the pooled OLS and RE estimations are presented in Tables 4.3 and 4.4. The twostep system GMM results is presented in Table 4.5 showing the results of FDI without interaction variable and FDI with interaction variable. It is worthy of note that the adoption of the RE is informed by the results of the Hausman test which revealed the p-value was more than the alpha of 5%, thus reinforcing the null hypothesis that the difference in coefficients is not systematic for the estimated models. It is also important to note that little effort is exerted towards the explanation of the baseline outcomes due to their econometrical inferiority when compared with the system GMM. Therefore, the main interpretations of the study are focused on the system GMM results. From the baseline estimations, it is observed that the results of the OLS and RE consistent in respect of signs but differ slightly in terms of magnitude and statistical significance. It is observed that FDI is statistically significant and inversely related to INDU in the OLS estimation and the results of the sign remain unchanged with the introduction of the interaction term, even though the magnitude of the coefficient

changes from -.107 to -.621 and the level of significance changes from 10% to 1%. It is also noticed that with the RE estimation, the sign remain the same (negative) with the introduction of the interaction term but the magnitude of the coefficient changes from .066 to .365. Thus, indicating that increasing FDI leads to decline in INDUS and vice versa in West Africa, with institutional quality being irrelevant in changing the dynamics. In the subsequent section, the main findings of the study based on the results of the twostep system GMM is discussed.

Table 4. 3: Baseline pooled OLS results

Predictor variables	Dependent variable: Industrialization (INDU)							
	Without interaction term				With interaction term			
	Coef.	St.Err.	t-value	p-value	Coef.	St.Err.	t-value	p-value
FDI	-0.107	0.060	-1.800	0.074*	-0.621	0.152	-4.080	0.000***
AGR	-0.210	0.026	-8.050	0.000***	-0.197	0.025	-7.730	0.000***
INV	-0.132	0.034	-3.930	0.000***	-0.138	0.033	-4.240	0.000***
INF	-0.096	0.046	-2.070	0.040**	-0.063	0.046	-1.370	0.174
lnGCAP	-1.853	0.575	-3.220	0.002***	-1.450	0.578	-2.510	0.013**
INSTQ	…	…	…	…	3.547	0.990	3.580	0.000***
FDI*INSTQ	…	…	…	…	-0.703	0.196	-3.580	0.000***
Constant	32.944	4.965	6.640	0.000***	31.988	4.899	6.530	0.000***
No. of obs.	165.000				165.000			
R-squared	0.430				0.478			
Prob > F	0.000				0.000			
F-test	24.032				20.527			

**** p<0.01, ** p<0.05, * p<0.1*

Note: INDU is industrialization, FDI is foreign direct investment, AGR is agriculture, INV is investment, lnGCAP is natural log of GDP per capita, INF is inflation, INSTQ is institutional quality, FDI*INSTQ is the interaction term for FDI and INSTQ.

Source: Research data (2022)

Table 4. 4: Baseline RE estimation results

	Dependent variable: Industrialization (INDU)							
	Without interaction term				With interaction term			
Predictor variables	Coef.	St.Err.	t-value	p-value	Coef.	St.Err.	t-value	p-value
FDI	-0.066	0.033	-2.030	0.042**	-0.365	0.101	-3.620	0.000***
AGR	-0.136	0.029	-4.720	0.000***	-0.131	0.028	-4.650	0.000***
INV	-0.017	0.024	-0.710	0.480	-0.016	0.023	-0.670	0.503
INF	0.004	0.044	0.090	0.926	-0.012	0.043	-0.280	0.778
lnGCAP	-0.382	1.049	-0.360	0.716	-0.436	1.081	-0.400	0.686
INSTQ					1.200	0.733	1.640	0.101
FDI*INSTQ					-0.398	0.127	-3.130	0.002***
Constant	15.960	8.582	1.860	0.063*	17.320	8.955	1.930	0.053*
Observations	165.000				165.000			
R-squared	0.297				0.362			
Prob > chi2	0.000				0.000			
Chi-square	29.030				39.740			
Hausman:x^2(p-value)	4.87(.678)							

**** p<0.01, ** p<0.05, * p<0.1*

Note: INDU is industrialization, FDI is foreign direct investment, AGR is agriculture, INV is investment, lnGCAP is natural log of GDP per capita, INF is inflation, INSTQ is institutional quality, FDI*INSTQ is the interaction term for FDI and INSTQ.

Source: Research data (2022)

4.3.1 Effect of FDI on Industrialization

Table 4.5 shows the results of the twostep system GMM estimation. From the results, it is seen that the lag of industrialization or the initial level of industrialization has a positive and statistically significant link with industrialization. This suggests that the initial level of industrialization has a greater bearing in the current pace of industrialization in the West African sub-region. It is also found that with the exception of investment (INV) which make up the gross capital formation, all the control indicators are not statistically significant in affecting industrialization. It is seen that INV is inversely and statistically significant, thus suggesting the gross capital formation making up investment crowd out industrialization in the West African sub-region, giving indication that the investments may be channeled to other activities which are not necessarily geared toward industrial activities.

In Table 4.5, the results on the link between FDI and industrialization which is the first objective of the study is presented. The results show that even though there is a positive link between the two factors, it is not statistically significant. This gives indication that FDI is not really relevant for the

industrialization of the West Africa sub-region. Indeed, the results provide an indication that the major FDI being attracted into the sub-region may be focused on resource seeking rather than manufacturing seeking, thus making it difficult to exert significant impact industrialization. It is also important to note that the result of the no significant link between FDI and industrialization may be as a result of unsupportive policies for serious industrialization drive in the sub-region. This is in harmony with the position of Gui-Diby and Renard (2015) that point the unencouraging effect on FDI on industrialization to unfriendly policies which do not allow for industrialization to thrive. It is important to emphasize that the outcome between FDI and industrialization is consistent with the theoretical contention of Markusen and Venables (1999) as well as the empirical outcome of Kang and Lee (2011). However, it is inconsistent with the results of Kaya (2010). It is interesting to note that the result is in tandem with the outcome of the study by Megbowon et al. (2019) that reported that FDI has negligible impact on industrialization.

4.3.2 Moderating Role of Institutional Quality

Table 4.5 further reports the results of the introduction of the interaction in the model which seeks to address the second objective of the study. The interaction term is introduced to determine whether institutional quality moderates the impact effect of FDI on INDU. This is being determined to offer insight into the extent of reciprocity that exist between FDI and INDU when quality institution is present. Per the results in Table 4.5, it is observed that the coefficient of the interaction term (FDI*INSTQ) is negative but the p-value shows that it is not statistically significant. This shows that institutional quality does not moderate the relationship between FDI and INDU.

The result is quite discouraging as one would have thought the quality institutions would have played a role in pushing FDI to advance industrialization. This gives indication of the decaying nature of institutions in the sub-region to effectively develop policies and programmes to influence the pace of economic development and consequently boost industrialization. It could be further be argued on the basis of the outcome that ineffectiveness of institutions opens the floodgate for repatriation attitude of foreign investors and consequently the gains from FDI becomes expletive resulting in decapitalization of the productive sector within the sub-region.

Table 4. 5: Results of dynamic panel data estimation- twostep system GMM

	Dependent variable: Industrialization (INDU)							
	Without interaction term				With interaction term			
	Coef.	St.Err.	t-value	p-value	Coef.	St.Err.	t-value	p-value
Constant	2.477	8.896	0.280	0.785	1.253	7.417	0.170	0.868
Lag INDU	0.900	0.167	5.390	0.000***	0.916	0.128	7.140	0.000*
FDI	0.006	0.027	0.230	0.824	-0.065	0.103	-0.630	0.537
AGR	-0.027	0.046	-0.590	0.564	-0.022	0.036	-0.600	0.557
INV	-0.037	0.020	-1.890	0.080*	-0.039	0.022	-1.780	0.097*
INF	-0.114	0.099	-1.150	0.269	-0.128	0.099	-1.300	0.216
lnGCAP	0.066	0.823	0.080	0.937	0.227	0.689	0.330	0.747
INSTQ	…	…	…	…	0.318	0.767	0.420	0.684
FDI*INSTQ	…	…	…	…	-0.102	0.119	-0.860	0.403
Diagnostics								
AR(1): z(p-value)	-2.10(.036)				-2.00(.046)			
AR(2): z(p-value)	0.47(.640)				0.49(.628)			
Sargan: x^2(p-value)	1.25(.741)				1.16(.762)			
Hasen: x^2(p-value)	0.86(.835)				0.77(.857)			
Fisher	92.772				513.488			
Prob > F	0.000				0.000			
No. of instruments	10.000				12.000			
No. of groups	15.000				15.000			
No. of obs.	150				150			

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Note: INDU is industrialization, FDI is foreign direct investment, AGR is agriculture, INV is investment, lnGCAP is natural log of GDP per capita, INF is inflation, INSTQ is institutional quality, FDI*INSTQ is the interaction term for FDI and INSTQ.

Source: Research data (2022)

4.4 Trend of FDI Inflows to West Africa

As required by the third objective of the study, the trend of FDI inflows into West Africa over the period from 2011 to 2020 is presented in this section. The result is present in Table 4.6 and supported with the graphical presentation in Figures 4.1, 4.2, and 4.3. From Table 4.6, it is found that the total FDI inflows into the West African sub-region was US$20.13bn, representing 33% increment on the inflows from the prior year. In 2012, the FDI inflow into the sub-region declined from the prior year figure to record US$18.4bn, indicating an 11% decline from the previous year. It is observed that the FDI inflow kept declining year on year from 2012 through to 2015 to record US$9.83bn. The year 2016 saw an improvement in trend from the prior year to record US$11.67bn, indicating a 16%

improvement. However, the trend could not be sustained and there was a further drop by US$1.23bn from the prior year figure to record US$10.44bn in 2017, representing 12% decline. Subsequently, the year 2018 recorded a decline by US2.27bn from the previous year to record a total FDI of US$8.71bn, representing 28% decline from the preceding year. Then again, there was a turnaround in the year 2019 with an improvement with a total FDI amounting to US$10.10bn, which show an increase by US$1.93bn from the previous year record, indicating 19% upwards adjustment. Unfortunately, the increment recorded in 2019 could not be maintained or go up further in the following year (2020). In 2020, the region recorded FDI inflows of US$9.71bn, which indicates a marginal decline by US$0.39bn, representing 4% decline.

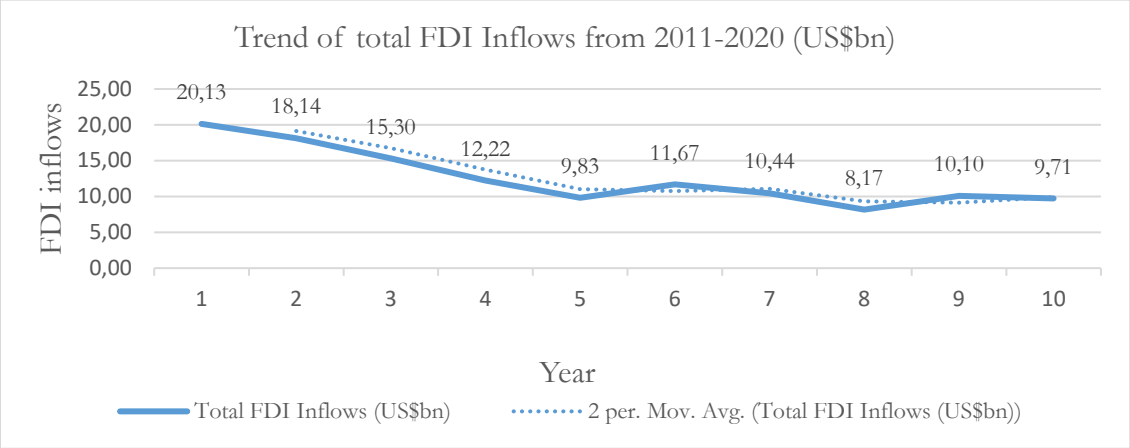
The trend outlook of the FDI inflows into the region over the period (2011-2020) shows that there was a decline in the years subsequent to 2011 through to 2015, then rose up in 2016 but further declined for the two consecutive years after 2016, then increased again in 2019 it went up but further declined in the year 2020. Figures 4.1, 4.2, and 4.3 shows that the trend of FDI inflows into the region during the period is more of a W-shape trend.

Table 4. 6: Trend of FDI inflows into West Africa from 2011 to 2020.

Year	Total FDI Inflows (US$bn)	Change in FDI inflows from prior year (US$bn)	Percentage change in FDI inflows from prior year (%)
2011	20.13	6.71	33%
2012	18.14	-1.99	-11%
2013	15.30	-2.84	-19%
2014	12.22	-3.08	-25%
2015	9.83	-2.39	-24%
2016	11.67	1.84	16%
2017	10.44	-1.23	-12%
2018	8.17	-2.27	-28%
2019	10.10	1.93	19%
2020	9.71	-0.39	-4%

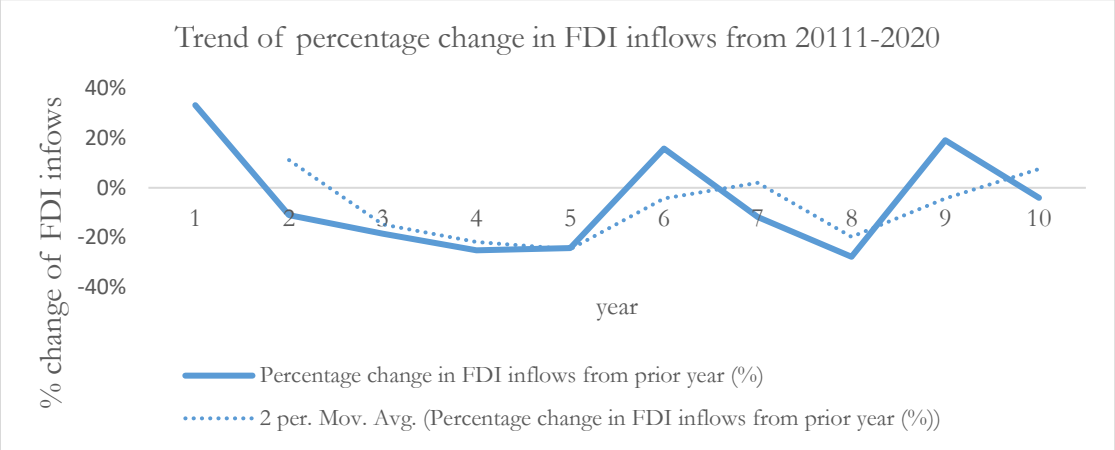
Source: Research data from WDI (2022)

Figure 4. 1: Trend of total FDI inflow into West Africa from 2011-2020



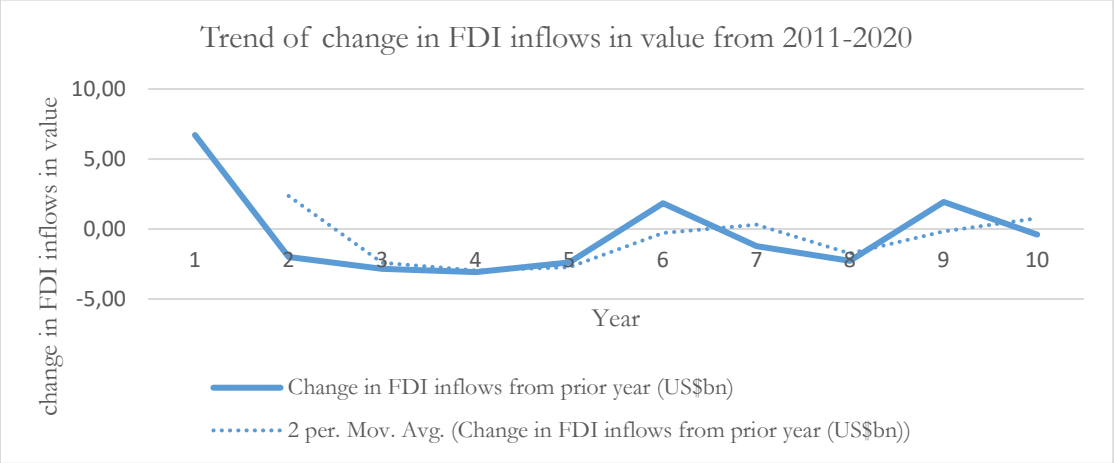
Source: Research Data (2022): obtained from WDI

Figure 4. 2: Trend of percentage change in FDI inflows to West Africa from 2011-2020



Source Research data (2022)

Figure 4. 3: Trend of change in FDI inflows (in value) in West Africa from 2011-2020



Source: Research data (2022)

4.5 Chapter Conclusion

The chapter has presented the analysis and discussion of the study. It began by looking at the preliminary analysis where the descriptive analysis and the correlation analysis of the research data are performed. This helped to provide an overview of the mean and various important summary statistics on the research data as well as helping to establish the correlation between the variables of the study. It then proceeded to look at the analysis and discussions on the empirical estimations using the baseline estimation approaches (pool OLS and RE estimations) which are used to establish preliminary link between the variables and the twostep system GMM technique which formed the main focus of the analysis. Under the twostep system GMM, analysis was provided for the first objective (i.e. the effect of FDI on industrialization) and the second objectives (i.e. the moderating role of institutional quality on the link between FDI and industrialization). Subsequently, the analysis was provided on the trend of FDI inflows into West Africa which is the third objective of the study. On the whole, the chapter has presented relevant analysis which sought to address the answer the research questions in order to fulfil the objectives of the study.

CHAPTER 5: SUMMARY AND CONCLUSION

5.1 Introduction

This chapter is the last chapter of the research paper. The chapter conveys three important sections. These are the summary, conclusion, and recommendations. The first section is the summary which provides a snapshot of the outcomes as specified by the research objectives. The second section is the conclusion where the conclusions drawn are presented. The last section is the recommendations.

5.2 Summary of Key Findings

The first objective of the study is to examine the effect of FDI on industrialization in West Africa. For this objective, the study reports that FDI has a positive relationship with industrialization but it is insignificant. This shows that FDI does not significantly influence industrialization in the West African region. This is quite interesting as it sends a signal that industrialization in the West African region is not dependent on FDI inflows into the region or it may be that the chunk of FDI inflows into the region is geared towards resource seeking ventures rather than carrying out industrial activities which opens up the region's economy to development.

The second objective of the study is to determine whether institutional quality moderates the relationship between FDI and industrialization. The study finds that institutional quality is not a significant moderator for FDI and industrialization. This means that institutional quality neither improve nor reduce the extent to which FDI affect industrialization in the West African region. Indeed, this sends signal of the possibility of ineffective institutions in the region; thus, being unable to develop policies that fuel the attraction of FDI in a manner that support industrialization.

The third objective of the study is to ascertain the trend of FDI inflows into West Africa in the decade from 2011 to 2020. The study reveals that there was a decline in FDI inflows after the year 2011 and this continued to 2015. However, it went up in the year 2016, but further declined for the two consecutive years after 2016, then increased again in 2019, but further declined in the year 2020. The study shows that the trend of FDI inflows into the West African region during the period is more of a W-shape trend, with downward and upward patterns.

5.3 Conclusion

Industrialization is regarded as a crucial factor that complement other relevant factors in propelling the development of most under-developed and developing economies and regions. With FDI inflow into most developing economies been on the rise, the pertinent question that keeps bothering various stakeholders is does FDI inflows contribute to the process of industrialization? To find answer to this question, this study aims to explore the role of FDI in the process of industrialization of West Africa. In doing so, it investigates how FDI influences industrialization in the West African region. To address the central goal of the study, three specific objectives are addressed. These are to: examine the effect of FDI on industrialization in West Africa; determine whether institutional quality moderates the relationship between FDI and industrialization; and ascertain the trend of FDI inflows into West Africa in the decade from 2011 to 2020. To achieve these objectives, the study employs the quantitative research approach and an explanatory research method. The study finds that FDI has no significant link with industrialization. Moreover, the study reveals that institutional quality does not moderate the relationship between FDI and industrialization. Additionally, it emerges that the trend of FDI inflows into the West African region during the period from 2011 to 2020 is more of a W-shape trend, with downward and upward patterns.

On account of the outcomes established, the study concludes that FDI is not a major determinant of industrialization in the West African region even though there are evidences of it being a major determinant for industrialization in some regions and economies. The study further concludes that the quality of institutions in the West African region exert no influence in affecting the relationship between FDI and industrialization in the region. Thus, it is not a determinant in moderating the how FDI influences industrialization in the West African bloc.

5.4 Recommendations

On the basis of the research outcomes, the study recommends that governments in the West African region should focus on developing policies that provides fertile grounds for FDIs to flow into sectors of the economy that can contribute to the process of industrialization of the region. This may require policies and regulations that minimize resources-seeking FDIs and maximizes industry-based FDIs. For instance, there can be tax incentives for industry-based FDIs against that of resource seeking FDIs. The study also recommends that governments within the West African region should focus attention on strengthening the robustness of institutions to effectively drive the flow of industry-led

FDIs since the quality of institutions is one of the key factors that investors consider in deciding on whether to invest in an economy or otherwise.

To further explore the subject and gain more insight into it, the study suggests that future research can use more similar country group. This is because the current study assumes all the countries are pursuing industrialization as a strategy towards economic development. However, different countries may be pursuing different development strategies. Additionally, future research can explore the subject by going beyond the variables employed in the current study.

Bibliography

Armah, B., 2013. Making sense of Africa's priorities for the post 2015 development agenda. *Development,* 56(1), pp. 114-122.

Armah, B., 2013. Making sense of Africa's priorities for the post 2015 development agenda.. *Development,* 56(1), pp. 114-122.

Barrios, S., Görg, H. and Strobl, E., 2005. Foreign direct investment, competition and industrial development in the host country. *European Economic Review,* 49(7), pp. 1761-1784.

Beji, S. and Belhadj, A., 2014. What are the determining factors of Industrialization in Africa. *Federalismi. it ,* 1(1), pp. 1-20.

Chen, G., Geiger, M. and Fu, M., 2015. *Manufacturing FDI in sub-Saharan Africa: trends, determinants, and impact.* Washington.: World Bank.

Cheremukhin, A., Golosov, M., Guriev, S. and Tsyvinski, A., 2017. The industrialization and economic development of Russia through the lens of a neoclassical growth model. *The Review of Economic Studies ,* 84(2), pp. 613-649.

Creswell, J. and Creswell, J., 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* 4th ediction ed. Newbury Park.: Sage.

Di Maio, M., 2009. Industrial policies in developing countries: history and perspectives. *Industrial policy and development,* 1(1), pp. 107-143.

Dodzin, S. and Vamvakidis, A., 2004. Trade and industrialization in developing economies. *Journal of Development Economics,* 75(1), pp. 319-328.

Dong, X., Song, S. and Zhu, H., 2011. Industrial structure and economic fluctuation – Evidence from China. *The Social Science Journal,* 48(1), p. 468–477.

Gui-Diby, S. and Renard, M., 2015. Foreign direct investment inflows and the industrialization of African countries. *World Development,* 74(1), pp. 43-57.

Hsiao, C., 2007. Panel data analysis—advantages and challenges. *Test ,* 16(1), pp. 1-22.

Iamsiraroj, S., 2016. The foreign direct investment–economic growth nexus. *International Review of Economics and Finance,* 42(1), pp. 116-133.

Kang, S. and Lee, H., 2011. Foreign direct investment and de-industrialisation. *The World Economy,* 34(1), pp. 313-329.

Kaya, Y., 2010. Globalization and industrialization in 64 developing countries, 1980–2003. *Social Forces,* 88(3), pp. 1153-1182.

Konings, J., 2001. The effects of foreign direct investment on domestic firms: Evidence from firm-level panel data in emerging economies. *Economics of transition,* 9(3), pp. 619-633.

Kriaa, I., Ettbib, R. and Akrout, Z., 2017. Foreign direct investment and industrialization of Africa. *International Journal of Innovative Applied Studies,* 2(3), pp. 477-491.

Kuznets, S., 1973. Modern economic growth: findings and reflections.. *The American Economic Review ,* 63(3), pp. 247-258.

Li, C., Murshed, S. M. and Tanna, S., 2017. The impact of civil war on foreign direct investment flows to developing countries. *The Journal of International Trade and Economic Development,* 26(4), pp. 488-507.

Mihalache, A., 2011. *Gambling on conflict: Foreign direct investors and political violence in developing countries.* Doctoral Dissertation ed. s.l.:The Pennsylvania State University.

Miller, D. and Salkind, N., 2002. *Handbook of research design and social measurement.* 1st edition ed. London: Sage.

Müller, P., 2021. Impacts of inward FDIs and ICT penetration on the industrialisation of Sub-Saharan African countries. *Structural Change and Economic Dynamics,* 56(1), pp. 265-279.

Ngouhouo, I. and Ewane, E., 2020. The Effects of Foreign Direct Investments on Industrialization: A Comparative Approach between the Franc and the Non-Franc Zone. *Asian Journal of Economic Modelling,* 8(1), pp. 123-132.

Nkoa, B., 2017. Foreign Direct Investment and Industrialization of Africa: A New Approach. *Innovations,* 3(1), pp. 173-196.

Oduola, M., Bello, M. and Popoola, R., 2021. Foreign Direct Investment, Institution and Industrialisation in Sub-Saharan Africa. *Economic Change and Restructuring,* 1(1), pp. 1-30.

Opoku, E. and Yan, I., 2019. Industrialization as driver of sustainable economic growth in Africa. *The Journal of International Trade and Economic Development,* 28(1), pp. 30-56.

Pegkas, P., 2015. The impact of FDI on economic growth in Eurozone countries. *The Journal of Economic Asymmetries,* 12(2), pp. 124-132.

Rekiso, Z., 2017. Rethinking regional economic integration in Africa as if industrialization mattered. *Structural Change and Economic Dynamics ,* 43(1), pp. 87-98.

Szirmai, A. and Verspagen, B., 2011. Manufacturing and economic growth in developing countries, 1950–2005. *Structural Change and Economic Dynamics ,* 34(1), pp. 46-59.

Ullah, S., Akhtar, P. and Zaefarian, G., 2018. Dealing with endogeneity bias: The generalized method of moments (GMM) for panel data. Industrial Marketing Management, 71, pp.69-78.. *Industrial Marketing Management,* 71(1), pp. 69-78.

United Nations. Economic Commission for Africa, 2013. *Making the most of Africa's commodities industrializing for growth, jobs and economic transformation: Africa's industrialization imperative*. ECA policy brief. No. 008 ed. Addis Ababa: UNECA.

United Nations, 2015. *Transforming Our world: The 2030 Agenda For Sustainable development: Resolution adopted By the General Assembly On 25 September 2015*. Geneva, United Nations General Assembly.