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Strategic impact of knowledge entrepreneurship on foreign direct investment in Nigeria

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Abstract

The study investigated the strategic impact of knowledge entrepreneurship on Foreign Direct investment in Nigeria. This study examined the rate of foreign Direct Investment (FDI) in Nigeria because the country has witnessed massive downward sliding of foreign direct investment in recent times. To solve this problem, this study is aimed at ascertaining the nature of impact Knowledge entrepreneurship has on foreign direct investment. The study also investigated the cause of the massive downward sliding of foreign direct investment in Nigeria. This study adopted the survey design. Simple random sampling technique was used in selecting the 200 staff of selected foreign direct investment firms in Nigeria. Findings revealed that there is a positive and significant relationship between knowledge entrepreneurship and Foreign Direct investment in Nigeria. This means that the knowledge of Foreign Direct Investment opportunity in another country will accelerate the action of the entrepreneur in taking advantage of the opportunity to make profit in that country. This is in tandem with Knowledge Spillover Theory of Entrepreneurship. Knowledge entrepreneurship has the potency to attract foreign direct investment hence the positive and significant correlation. The study also found that knowledge entrepreneurship has resulted in technological transfer to Nigeria and employment generation as well as increased profitability and market share of the FDI operating in Nigeria.The study concludes that knowledge entrepreneurship is a viable business model in Nigeria and that the reason for the massive and downward sliding of Foreign Direct Investment in Nigeria currently is as a result of the national challenges of high insecurity and exchange rate volatility.

Keywords: Knowledge Entrepreneurship; Foreign Direct Investment; Knowledge spillover theory; Foreign exchange; Strategic Management

1. Introduction

Knowledge Entrepreneurship is the capacity to see or create an opportunity and take action to realize a cutting-edge knowledge practice or product (Senges 2007). Knowledge entrepreneurship is a new field of modern business. Knowledge entrepreneurship differs from 'conventional' economic entrepreneurship in that it places more emphasis on chances to advance production (Imide & Chukwuka 2022) and knowledge (such as via human change) than it does on maximizing financial gain. According to Skrzeszewski (2006) knowledge entrepreneurship is the type of entrepreneurship that non-profit educators, researchers, and educational institutions should focus on. According to the Knowledge Spillover Theory of Entrepreneurship, entrepreneurship is the only process by which knowledge is used for economic purposes, and this theory advances our understanding of the crucial function of the entrepreneur in the market economy (Acset al., 2009). They define knowledge-based entrepreneurship (KBE) as "a phenomenon driven primarily by the climes of information-knowledge philosophy which is characterized by high value innovation and creativity, and which is characterized by high value innovation and creativity, high value innovation, and high value. According to Bishop (2006), Knowledge Based Entrepreneurship (KBE) refers to the dissemination of information

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created in the disciplines of research and technology in anticipation of commercial use. Tactic and encoded knowledge are examples of the characteristics of scientific knowledge that KBE addresses, and it takes workers with scientific training to transmit both types of knowledge (Witt and Zellner, 2005). Depending on the circumstances surrounding the event of the business's actual establishment, the initial conditions for each particular company will vary from venture to venture (Johansson, 2005). However, relying only on internal resources, it is critical to establish ties with other agents in order to have access to meaningful information since internal resources are insufficient and external resources are equally crucial, particularly for small and creative enterprises. Knowledge spillovers, also known as the flow of knowledge through networks, are processes that provide technological information, competitor information, market trends, operating or management procedures (Gilbert and Kusar, 2006). These mechanisms can include sharing communities, which act as a catalyst for new knowledge.

Foreign Direct Investment (FDI) on the other hand, occurs when a resident of one country obtains a lasting interest in, and a degree of influence over the management, of a business enterprise in another country (commonly defined as 10% or more of the voting securities or equivalent interest). FDI can take the form of the establishment of new operations ("greenfield investments"), the purchase of existing operations (mergers and acquisitions, M&As), or the addition of capital to existing operations. It is distinct from portfolio investment, i.e., ownership of stocks, bonds, or other financial assets (Congressional Research Service 2022). The growth of Foreign Direct Investment (FDI) in the Least Developed Countries including African countries has been extremely rapid in recent decades, mostly in countries which have a bigger market size and natural resources. A foreign direct investment (FDI) refers to an investment made by a company or individual in one country into business interests located in another country (OECD 2020). Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets in a foreign company (Chukwuka & Amahi 2021).

However, Nigeria is currently faced with the problem of Foreign Direct investment sliding so low which has drastically affected the economy. As businesses were discouraged from developing in the largest economy in Africa due to a severe dollar shortage, foreign direct investment into Nigeria fell by a third in 2017 (Chukwuka & Imide 2023).

Investment decreased from $698 million in 2021 to $468 million in 2022, according to data released on Tuesday by the National Bureau of Statistics. According to the data, FDI has decreased by almost 90% from a peak of $4.7 billion in 2008. This study wants to solve this problem by investigating the impact of Knowledge Entrepreneurship in boosting Foreign Direct Investment in Nigeria.The objectives of the study are to ascertain the nature of impact of Knowledge Entrepreneurship on foreign direct investment and to investigate the cause of massive downward sliding of foreign direct investment in Nigeria.

2. Review of related Literature on Knowledge Entrepreneurship

Many scholars have written on subjects linked to knowledge entrepreneurship, but only the few works that have been discovered to have utilized the concrete word "knowledge entrepreneur" (and derivates) are discussed in this section. The majority of them do not only have a broad Although the Ph.D. research carried out by McDonald (2002) was found to propose and test a useful conceptualization, which subsequently served as model which basis for the emerged in this research (Haig, 1995; Kinach, 1995), complementary/matching understanding of the concept and are thus only contextually relevant to this research. The books and journal papers that have been published are discussed in the paragraphs that follow: In a paper titled "Surfing the long wave: Knowledge entrepreneurship in Britain" released by the Demos Think-Tank (Leadbetter & Oakley, 2001), professor and consultant Colin Coulson-Thomas has been advocating his own take on the idea. Last but not least, the librarian Skrzeszewski (2006) wrote about knowledge entrepreneurship in the context of librarians. He discussed it in seminars and the book "The Knowledge Entrepreneur" (Coulson-Thomas, 2003).

The UK's policy-making process is intended to be influenced by the Demos study. It begins with an introduction to entrepreneurship and a discussion of the benefits of having an enterprising society. After that, a selection of case studies from the UK's creative IT services (gaming and animation) is presented. They refer to the act of launching a business on the basis of knowledge work as "knowledge entrepreneurship," notwithstanding the lack of a clear definition for the phrase. Coulson-Thomas' book "The knowledge entrepreneur" is an intriguing management consultant book. He brings reams of advice to the table due to his years of expertise as a board member and management professor. There are several broad chapters in "The Knowledge Entrepreneur" (such as "Contemporary Information Problems" or "Requirements of Different Stakeholders"). Although this book is mostly focused on practitioners rather than academics, it does contain some novel ideas that are noteworthy. Although there is no precise definition of a knowledge-based opportunity, which makes it difficult to distinguish from (traditional) resource-based possibilities, all opportunities are described by him as being separate from knowledge-based opportunities.

Opportunities often rely on knowledge, unless they are entirely based on intuition or spontaneous action. He also offers a list of eleven concepts that knowledge entrepreneurs should be aware of. It is a very long list that begins with the capacity to gather, create exchange, manages, and use information, knowledge, and understanding, as well as the corresponding means of support, and concludes with the ability to direct and oversee knowledge workers, network organizations, and other organizations. You possess the whole spectrum of abilities that a successful leader in today's world should possess in between. As previously said, it is a book for practitioners outlining a perfect entrepreneurial manager who understands the value of information. The Entrepreneurial Librarian was the intended title of Stan Skrzeszewski's third book, "The Knowledge Entrepreneur," which details how to adopt the entrepreneurship paradigm in the field of librarianship (ibid., p. v). A knowledge entrepreneur is someone who is adept at developing and utilizing intellectual property for the establishment of new businesses or services that will result in the production of personal and communal wealth or improved and enhanced services, according to his definition. The knowledge entrepreneur needs enough personal knowledge capital to be able to employ that capital to produce value and/or riches (ibid., p. 3). The term is fairly vague thus far. Only the reliance on preexisting intellectual capital and the outcome of "wealth creation and/or improved services" truly hints to a different purpose than knowledge product or service per se, which is complimentary with the conceptualization employed in this research. The knowledge entrepreneur must be more knowledgeable than his or her customer or supervisor about the issue at hand, he says. The capacity to explain, present, or most importantly apply the knowledge asset can make a difference even when it is not necessarily much greater (ibid). This argument does not hold water in the context of this research, however, as the emphasis is on seizing an opportunity rather than making use of the intellectual capital that already exists. Skrzeszewski goes into further detail about how information technology is a major trend to be His librarian perspective emerges once more: "There is an increasing demand and expectation for relevant and useable digital information goods and services. Information overload is an increasing issue at the same time. As a result, there is a concomitant need to organize and package information for users, to contextualize information, to offer information intermediates and facilitators, and to digitize all forms and formats of information all huge economic potential (ibid., 31). The fourth author, McDonald (2002), has completed his PhD study on a comparison of hospital conditions regarding their approaches to information sharing and exploration and is the author of "Knowledge Entrepreneurship: Linking Organizational Learning and Innovation." the innovation's entrance. The research is judged to be extremely pertinent, and a modified version of his created theory is detailed (see below) and used in this study.

Jennifer Rowley is another author who has included the concept. How organizational learning might be conceived in a meaningful way is the topic of Rowley's study "From learning organization to knowledge entrepreneur" (Rowley, 2000). She emphasizes learning and the value of codified information in this way. She elaborates on the idea of the knowledge entrepreneur in this setting. According to her interpretation, "a knowledge entrepreneur organization realizes the multifaceted nature of knowledge and the implications this has for organization learning. In particular, I am aware of how to integrate organizational learning and systems development so as to maximize and take advantage of its knowledge resources in order to achieve its vision (ibid., p. This understanding articulates the importance of knowledge entrepreneurship as presented in this research in a new way. The Human Relations journal has also published a brief essay titled "It's difficult to innovate: The death of the tenured professor and the birth of the knowledge entrepreneur" (Bouchikhi & Kimberly, 2001). The essay imagines a day not too distant in which information. According to the entrepreneur, "working under a diversity of employment contracts and attachments" (ibid., p. 82). Thus, "knowledge entrepreneurs will be hired and paid based on their capacity to conceptualize, implement, and use the findings of research to develop original educational products." As they "break[in] out of their institutional strait jackets and redefine their roles in the production of knowledge," the writers, who are primarily talking about business and management education, create a scene in which everything has undergone a fundamental transformation.

2.1. The Knowledge Entrepreneurship Model

Knowledge entrepreneurship differs from 'conventional' economic entrepreneurship in that it focuses on the realization of possibilities aimed at enhancing the production (Skrzeszewski 2006) and throughput of knowledge (such as personal transformation; Harvey & Knight, 1996), as opposed to improving the flow of capital to increase financial gain. The following is then used as a working definition of knowledge entrepreneurship: Entrepreneurship via knowledge is the capacity to discern or generate a chance and take action to bring the novel knowledge practice or product to life. But there is also an entrepreneurial aspect, which I try to elucidate in the sentences that follow.

According to Clark (Clark, 1998, 2004), "entrepreneurial" is employed as a trait that may be ascribed to initiatives as well as organizations as social systems and to individuals. Contrary to Clark, this study emphasizes the dynamic process of vision17 and change elements of entrepreneurship, also known as entrepreneuring (Kuratko, 2006; Schumpeter & Opie, 1934).

Accordingly, "the essential act of entrepreneurship is new entry" (Lumpkin & Dess, 1996), or to put it another way, "the act of entrepreneurship is the pursuit of new ways of doing things in a real context." Alternatively, Brown stated that "entrepreneurship is a process of exploitation of opportunities that exist in the environment or that are created through innovation in an effort to create value." (Brown & p. Ulijn, 2004). Kanter (1983) does a good job of capturing this idea of looking ahead. She asserts that business owners and entrepreneurial organizations "always operate at the edge of their competence, concentrating more resources and attention on what they do not yet know (for example, investing in R&D) than controlling what they already know." They assess their progress not in terms of how far they have come, but rather in terms of how far they still have to go. Additionally, they don't let the past constrain the present; just because something didn't work in the past doesn't imply it can't be made to work in the future. And just because something has worked in the past does not always indicate that it will work again" Kanter as cited in Cornwall & Perlman (1990), pp. 27–28.

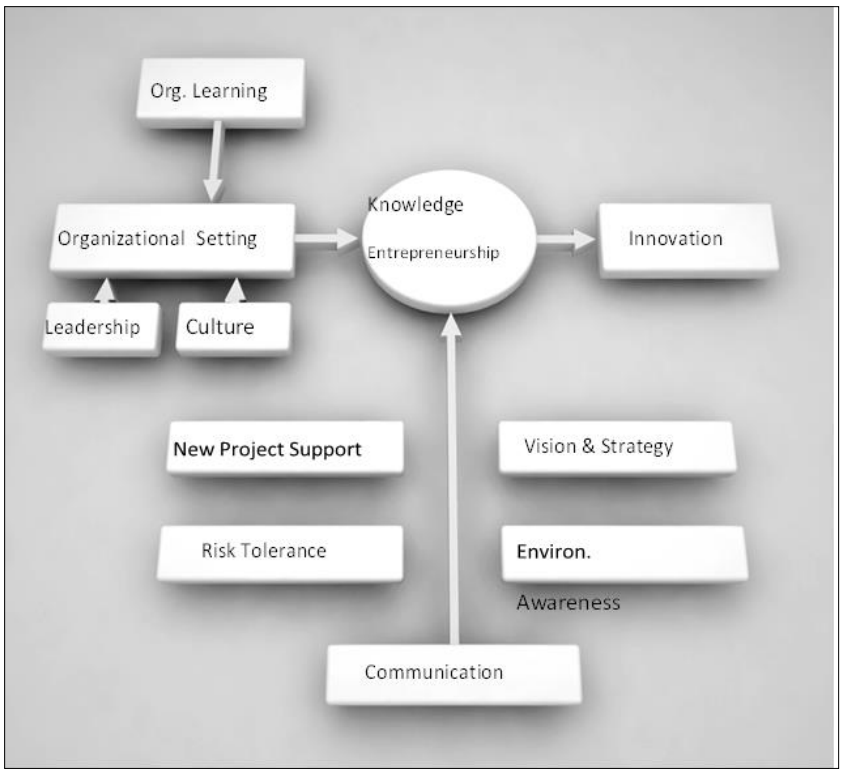

Figure 1 Amended Knowledge Entrepreneurship Model from McDonald(2002)

As a starting point or "orienting theory" (Haig, 1995; Kinach, 1995), McDonald (McDonald, 2002, pp. 12-33) is used to develop the following particular collection of attractors that are thought to have a direct impact on knowledge entrepreneurial capacity (figure 1.6). As follows: environmentally conscious outlines the methods and degree to which the organization collects data on its internal and external environments. Cornwall and Perlman (1990) agreed that this approach was essential for the creation of an entrepreneurial organization. They state on page 46 of the same publication that "scanning should be a fundamental component of every manager's job, not something that is done by top management in conjunction with the annual update of the strategic plan." As a result, the notion covers tasks including internal requirements analysis, benchmarking, and networking among organizations. The organization's risk-taking philosophy, the idea of risk tolerance is fundamental to the pursuit of any innovation. The organization's entrepreneurial vision is covered by a factor that is not a component of the McDonald's model (and which substitutes the variable termed analytical diligence19) (Kuratko, 2006). This skill, which explains its culture of imagining and scouting potential developments, is closely tied to strategic thinking and planning. The level of institutionalization of new initiatives as a mechanism of institutional growth is referred to as "new project support." By doing this, the financial resources and managerial focus on experimental ventures are examined.

The final factor seen as a significant one in knowledge entrepreneurship is communication. The variety of communication channels and the organizational style of communication and the depth of the available communication channels are assessed here.

Additionally, the organizational situation described by its environment, its present leadership, and its organizational culture determines the broad prospects for knowledge entrepreneurship. The organizational context, which includes the company's size, kind of institution, business model, history, and traditional attitude to innovation, therefore represents the fundamental facts of the organization. The governance system itself, the style and values of the present top decision-makers, and leadership are all assessed. Understanding organizational culture is essential for determining whether an organization is in an enabling or disabling state, how it responds to organizational learning, and if ideals like innovation, competition, and entrepreneurship are valued or disregarded.

Knowledge entrepreneurship is expected to increase inventiveness on the production side, which will afterwards improve performance. The most significant result of organizational entrepreneurship, however, is long-term: a more adaptable and resilient organization. p. 29 of Cornwall & Perlman's 1990 book. Universities are fundamentally different from businesses, as we shall see in the next chapter, and I will contend that this makes them the best study subjects for knowledge entrepreneurship because their goal is the creation and innovative destruction of information as a public benefit.

2.2. The University and Knowledge Management

In her extremely insightful work on the issue of whether higher education is prepared for knowledge management, Jennifer Rowley (2000) states that universities "have no experience of valuing their intellectual capital and entering those values on their balance sheets." The study provides a solid overview of the difficulties and advantages of knowledge management in higher education, a subject that, two years later, became the focal point of an OECD High Level Forum. The prevailing opinion of the experts is summed up as follows: "Despite being in the learning business, teachers, schools, and education authorities are notoriously bad knowledge sharers" (OECD, 2002). Although each individual contribution (such as those by Osterlinck (2002) and Oakley (2002) raise some intriguing points, they tend to be more descriptive and theoretical in nature. The short but really interesting document "Applying corporate knowledge management practices to higher education" written by three Price Waterhouse Cooper practitioners (Kidwell, Vander Linde, & Johnson, 2000) is just the contrary. The applicability and advantages of knowledge management for research, curriculum development, student and alumni services, administration, and strategic planning are then briefly discussed by the writers. A further excellent addition is the By Piccoli, Ahmad, and Ives (2000), an organizational framework for effective knowledge throughputs was developed. Due to their desire to "fundamentally reengineer knowledge creation and delivery" in universities, their report is especially pertinent to this study. Everyone, including the (learning) students, participates in the creation of the knowledge product (in their instance, a piece of software) under the entrepreneurial knowledge production and learning framework that they have adopted at their institution. The suggested knowledge development and distribution process is driven by three entities, or engines. In addition to providing leadership and setting objectives for the organization, faculty and researchers in the research engine also keep track of developments and assess outcomes (knowledge creation and acquisition). Under the guidance of those in charge of the research engine, graduate students working in the production engine generate and store information as part of their own training. Finally, under instructor guidance, students utilize their newly acquired information by absorbing it in the learning engine. (ibid p. 232). According to evaluations, this concept is really intriguing and a fantastic illustration of knowledge management as knowledge entrepreneurship. But it turns out that this instance is an exception. In general, the OECD statement is accurate; universities are the prototypical knowledge-driven organization, but neither knowledge management nor the idea of intellectual capital is used in their operations.

2.3. The University as a Knowledge Entrepreneur

One major difficulty raised in the contemporary discourse on university reform is seen to be resolved by the idea of the institution as a knowledge entrepreneur. What function does the university's administration serve? In addition, the paradigm of the university as knowledge entrepreneur might offer one hypothesis for the function of the university in the knowledge society of the twenty-first century. The creation of knowledge is at the core of knowledge entrepreneurship. It describes the capacity to recognize and make use of information and other advances that improve knowledge production. The university is an inherently entrepreneurial institution, according to Fuller (2006). He explained the continuous creation and inventive destruction of knowledge at universities. According to him, research at the institution generates knowledge. The transmission of that information to the industry and students serves as the second step towards its deconstruction.

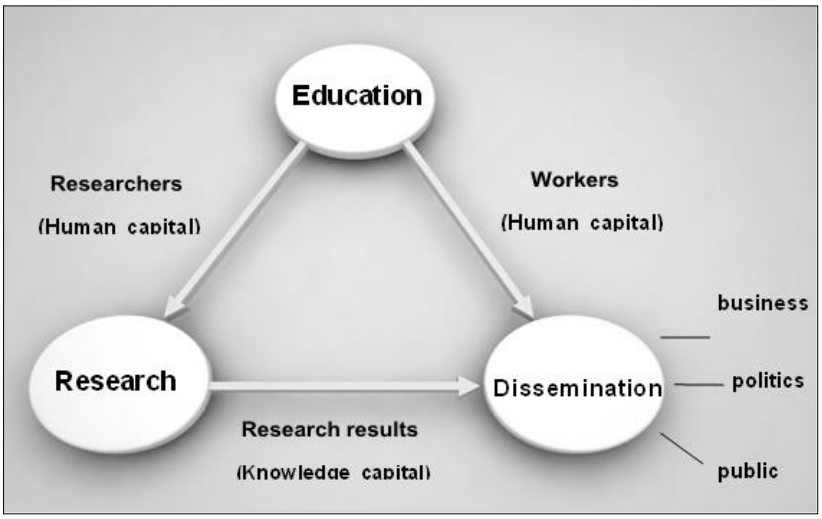

Figure 2 The University as Knowledge Entrepreneur (DevelopedfromFuller, 2006)

According to him, this process is inherently entrepreneurial since some of the students go on to become the researchers of the future, who subsequently produce new knowledge by destroying what is already known. As a consequence, the old knowledge's competitive advantage is gone and new value has been produced in the shape of the study findings. He illustrates the continuous generation of knowledge capital (through research) and human capital (through education) that flow towards the third objective and is used there to support societal, political, and corporate concerns. The three missions of the contemporary university have been understood and projected onto this process (Figure 1.7). It was incorporated into the original theory.

2.4. The University Knowledge Entrepreneurship Model

The investigation of the existing organizational and strategic practice around the adoption of internet-based innovations in universities uses the following model as a schematic framework. The ability to create and practice knowledge entrepreneurship is determined by organizational conditions, as shown, and this capability has a significant impact on the adoption of internet-based innovations, which in turn has an impact on institutional knowledge performance overall. The components of knowledge entrepreneurship being looked at include the three purposes of the institution as well as the "business administration" duty. The ability and incentive of the individual to embrace the idea, as well as the systemic organizational environment that either fosters or limits the potential, are the two components of organizational knowledge entrepreneurship. As will be described in the study strategy, this issue is solved using the adaptive complex systems' fractals feature. One essential feature of the existence and efficacy of organizations' knowledge and entrepreneurial capacity is not represented when considering the suggested model and its components.

For two reasons, the presented model is examined for the unique situation of the appropriation of internet-based inventions. First off, since my expertise is in knowledge systems and internet-based collaborative systems, it seems sense that this is the area in which I have the greatest experience. Second, it has been suggested that the internet has the ability to radically disrupt how we learn and, as a result, how education is structured globally (Tiffin & Rajasingham, 2003). Therefore, if there is potential for this (and some developments, such as Open Educational Resources and UOC's success, point in that direction), the capacity to foster knowledge entrepreneurship skills in this area seems particularly crucial. Following is a review of the literature on innovation in higher education, with a focus on ICT integration.

2.5. Concept of Foreign Direct Investment (FDI)

Foreign Direct Investment (FDI) is the process where people in one country obtain ownership of assets for the purpose of gaining control over the production, distribution and other activities of a firm in a foreign country (Moosa, 2002). The OECD Benchmark Definition of Foreign Direct Investment (OECD, 1996) defines FDI as “the objective of obtaining a lasting interest by a resident entity in one economy (direct investor) in an entity resident in an economy other than that of the investor (direct investment enterprise)”. The lasting interest reflects the continuation of a long-term relationship between the direct investor and the enterprise and a considerable level of influence on the management of the enterprise. The terms “influence” or “control” and “long-term” are used to make a distinction between FDI and portfolio investment because the latter is a short-term investment where the investor does not seek to control the firm. The influence over management decisions and productivity is also the part that differentiates FDI from other types of

international investments. This influence implies for instance, that the investor has an ability to elect members on the board of directors of the foreign firm or subsidiary (Moosa, 2002).

2.6. Foreign Direct Investment in Nigeria

As businesses were discouraged from developing in the largest economy in Africa due to a severe dollar shortage, foreign direct investment into Nigeria fell by a third in 2017. Investment decreased from $698 million in 2021 to $468 million in 2022, according to data released on Tuesday by the National Bureau of Statistics. According to the data, FDI has decreased by almost 90% from a peak of $4.7 billion in 2008. Nigeria's numerous currency rates and the central bank's dollar restrictions are major turnoffs for foreign investors. Bola Tinubu, the president-elect who will succeed President Muhammadu Buhari on May 29, has promised to examine the foreign exchange policy of the central bank. In order to entice businesses, spur economic growth, and generate employment, he will need to act rapidly. Kale (2023), chief economist at KPMG in Nigeria and a former director of the country's statistics office, emphasized the need of having a clear understanding of the country's foreign currency strategy in order to attract international investment. "Substantial fiscal reforms aimed at reducing deficit finance and improving revenue generation," he stated, are necessary for the next administration.

The International Monetary Fund has identified central bank involvement as a barrier to capital inflows in Nigeria's foreign currency market. Since Buhari took office in 2015, the official market value of the naira has fallen by 57% versus the dollar. The most populous country in Africa has seen a decline in business due to a lack of dollars and limitations on remitting cash home. Because it can't get its money out of the nation, Emirates Airlines stopped flying there in August. According to a March allegation in the Lagos-based Punch daily, the Central Bank of Nigeria is preventing international airlines from repatriating at least $744 million. The largest packaging manufacturer on the continent, Nampak Ltd. of South Africa, announced in December that it would be leaving the country of West Africa. Some people have already left.

According to MosopeArubayi, an economist with IC Securities Ltd. in Accra, Ghana, declining capital flows would result in a decrease in government revenue. Lower inflows put greater pressure on the naira's currency rate.

Table 1 Nigerian Foreign Direct Investment Data as at 2022

Indicator	Data	Period
Foreign Direct Investment in Nigeria	753 USD Million | 0.753 B USD	4Q/22

2.7. Latest data on Foreign Direct Investment in Nigeria (USD million)

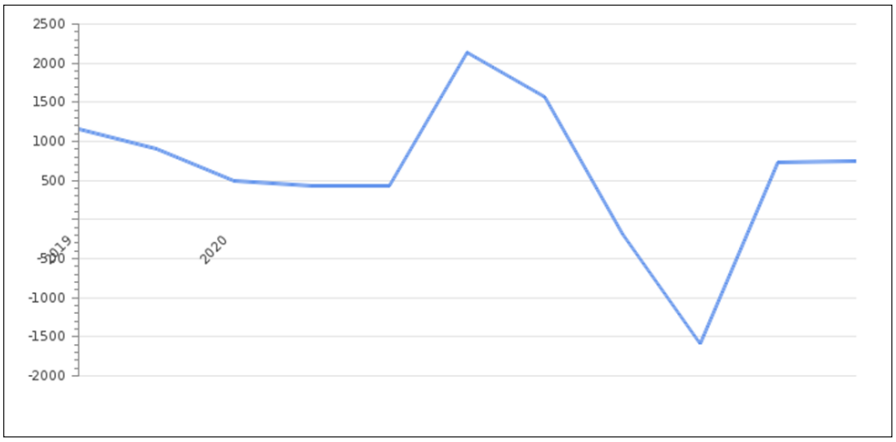

Figure 3 Nigerian Foreign Direct Investment Data as at 2022

How much foreign investment does the Nigeria have?

Foreign Direct Investment in Nigeria increased by 753 USD Million (0.753 B USD) in the fourth quarter of 2022. The maximum growth was 3085 USD Million and minimum was 63.5 USD Million.

Table 2 List of Countries by Foreign Direct Investment as at 2022

Country	Period	Actual	Unit	Previous
Albania	4Q/22	0.429	B USD	0.38
Libya	2021	-0.222	B USD	-0.102
Lithuania	3Q/22	0.533	B USD	0.784
Luxembourg	4Q/22	-400.274	B USD	-23.02
Macau	2021	-0.794	B USD	8.466
Macedonia	Dec/22	0.091	B USD	0.1
Malawi	2019	0.112	B USD	0.102
Malaysia	4Q/22	4.33	B USD	2.761
Maldives	2021	-0.444	B USD	-0.441
Malta	4Q/22	1.132	B USD	1.267
Mauritius	2021	0.341	B USD	0.375
Mexico	4Q/22	1.548	B USD	3.443
Moldova	4Q/22	0.075	B USD	0.197
Mongolia	4Q/22	27.752	B USD	27.804
Montenegro	2022	1.272	B USD	1.025
Morocco	4Q/22	2.146	B USD	0.378
Namibia	4Q/22	0.273	B USD	0.25
Nepal	2021	0.149	B USD	0.149
Netherlands	4Q/22	-111.331	B USD	58.614
New Zealand	4Q/22	1.016	B USD	1.31
Nicaragua	3Q/22	-0.346	B USD	-0.329
Nigeria	4Q/22	0.753	B USD	0.726
Norway	4Q/22	-1.161	B USD	3.933
Oman	2021	4.015	B USD	2.885
Pakistan	2023	0.223	B USD	-0.017
Palestine	4Q/22	3.116	B USD	2.997
Panama	2Q/22	0.536	B USD	0.729
Paraguay	4Q/22	0.089	B USD	-0.081
Peru	4Q/22	1.462	B USD	2.515

2.8. The impact of Foreign Direct Investment on output growth

The results for the basic model show that a significant effect from FDI is seen in the food industry. This can be explained by the importance of marketing, brand names and the like for this industry. In two more industries the impact from FDI on output growth is significant: first in textiles and wood and second in the group containing the petroleum, chemicals, plastics and rubber industry (henceforth called PETCHEM). The result for textiles/wood is surprising. Since the industry category PETCHEM includes among others pharmaceuticals a strong effect from FDI can be expected. However, one would also have expected FDI in the electrical machinery industry to play a role for output growth. Still, it appears that the effect of FDI on output growth is not unique across industries. The effect from FDI seems to matter more in lower-tech, resource intensive industries according to these first results. Next, we interact FDI with investment, since it is often

pointed out that a sufficient level of investment is important to bring out the positive effects of FDI. High investment implies newer vintages of the capital stock and as a result the structure of the capital stock is more suited to absorb new technologies. Thus, FDI in combination with high investment may result in highly favourable conditions for subsequent output growth. Conversely, the role for FDI may be severely limited when it is not accompanied by sufficient investment in general. This idea is captured by a multiplicative term of FDI growth and the investment share in our specification. The coefficient on the interaction term is expected to be positive. We further relate FDI with openness on the export side because the two are often seen as complements and again, FDI may have a qualitatively different impact in export-oriented industries as compared to domestic-market oriented industries. The sign on this interaction term is in principle ambiguous and partly related to the motive for FDI. Labour- or resource-seeking FDI is clearly associated with high exports, thus if this type of FDI promotes growth, the coefficient on the interaction term should be positive. However, such forms of FDI may be detrimental for the host country, as in the Nigerian example (Akinlo, 2004). In this case the coefficient would be negative. In the case of market seeking FDI no clear relationship between FDI and exports are expected in the first place (i.e. they may be complementary or substitutes), hence no clear predictions can be made about the sign of the coefficient on the interaction term.

The interactions with investment and openness both change the results greatly. It appears that a positive growth impact from FDI arises only in connection with high investment levels in almost all industries. The purely exogenous effect from FDI alone is mostly negative. With the interaction terms, a significant effect from FDI arises also in the transport industry. In other words, FDI leads to increased output growth only in the presence of high investment shares. Turning to the interaction with openness of an industry in some detail, the only industry with an additional significant impact from FDI alone is the PETCHEM industry which is a special industry group. It would be highly desirable to have detailed information on each individual industry contained in this group, since petroleum extraction is not only very capital intensive, but also very closely tied to endowments and thus not relevant for every country in the sample. Chemicals on the other hand cover a very wide spectrum of economic activities ranging from low-skill, resource intensive production to high-skill, technology intensive activities (such as pharmaceuticals). However, for the present sample, covering a wide range of countries, any further disaggregation was not possible. Again FDI in the electrical machinery industry, comprising activities such as the manufacture of computers and information and communication equipment, show no significant effect on output growth. Actually, it is surprising that for none of the three variables - FDI, investment and exports – a significantly positive coefficient was observed in this industry. We interpreted this finding as follows: International knowledge and technology spillovers (through FDI and/or trade) are either too small or too difficult to be absorbed in this high-tech and high-skill industry. In contrast, the medium skill intensive transport industry seems to be especially conducive for significant and positive spillovers from FDI. The coefficients on all three variables – FDI, investment, and openness - are often significant in less skill intensive industries, i.e. transport equipment. This specific result reflects the special importance that the transport sector in general and in particular outsourcing and international fragmentation in this sector receive in catching-up countries, especially in the OECD members among them (like Mexico, Spain, etc.). The same holds true for food and textiles. The specifications including the interaction terms indicate that FDI on its own does not show significant effects, it needs to be accompanied by something else in order to have statistically significant effects in almost all industries apart from PETCHEM. The question now arises what this "something else" is. In other words, it is not clear from our analysis whether the impact from FDI is tied to the level of investment in the industry, to the openness of the industry and how much other factors such as stage of development and human capital add to this link.

Given the importance attached to the stage of development as a determinant of the absorptive capacity of a country in the literature, we will now focus more on the role of absorptive capacity. We look at the interdependencies between the stage of development (as a more general determinant of absorptive capacity than human capital) and the two other controls, investment and openness. Since a three-way interaction would not lead to any meaningful interpretation of the coefficients, we divided our sample into two broad groups which can roughly be associated with differing stages of development. The first group contains advanced OECD member countries, while all other countries are classified as catching-up countries and subsumed in the second group (see Appendix Table A1 for a listing of countries and their grouping). These two groups of countries are relatively homogenous in terms of schooling, initial and current GDP.

2.9. The Potential of Green Foreign Direct Investment

The scale of FDI's contribution to financing EGS sectors investment and transferring environmentally-friendly technology and practices has so far received less attention than, for example, ODA or trade. Yet, levels of FDI greatly outstrip the level of ODA in many countries. FDI also has the potential to contribute directly to transfer of know-how, whereas trade does so indirectly through embedded technologies. The Rio Earth Summit of 1992 asked that industrialized nations make an additional USD 125 billion available to developing nations to assist them on a path to sustainable development (Dauvergne 2008). While ODA is an important avenue for promoting development in general,

and environmental sustainability in particular, its magnitude is limited by pressures on government budgets in donor nations and absorptive capacity in host countries. OECD estimates that ODA in support of climate change mitigation from members of the Development Assistance Committee (DAC) rose from USD 3.8 billion in 2007 - i.e. some 4% of their ODA (OECD 2009a) – to USD 8.5 billion in 2008 (8% of ODA) and above USD 9 billion in 2009. In 2007-2008, ODA from DAC member countries focused on environmental sustainability in general averaged USD 13 billion. In the last two decades, global FDI has increased dramatically relative to ODA. Although developing countries' share of global inward FDI has not grown , absolute levels of FDI going to developing countries have increased from USD 43 billion in 1990 to USD 621 billion in 2008 (OECD, 2010f). According to Corfee-Morlot *et al* (2009), considering ―mitigation-relevant industries that contribute most to global warming and other pollution (agriculture, forestry, mining, manufacturing, energy, transport and construction), FDI flows greatly exceed ODA and export credits specifically targeted at these industries. Nevertheless, ODA remains an important source of development capital and is a complement rather than a substitute for FDI, for 3 reasons. ODA was greater than FDI for 55 of the world's 70 poorest nations in the late 1990s; for 42 of those countries, ODA flows were double FDI flows (Zarksy and Gallagher, 2003). Foreign aid serves to develop local infrastructure, a pre-requisite for future FDI (Blaise, 2005). FDI performs at higher environmental standards in developing countries with strong environmental institutions, and ODA is an important funding source for strengthening environmental enforcement capability (OECD, 2002).

2.9.1. The determinants of the greening effects of Foreign Direct Investment

Generally, strong environmental regulation and enforcement have been shown to be key drivers for firms to acquire environmental technologies and green their operations. Johnstone et al. (2007), for instance, finds that perceived stringency of the policy regime is the most significant influence on environmental performance of firms, based on a representative sample of 4000 manufacturing facilities. When it comes to foreign investment, the stringency of home country environmental regulation has also proved to have a significant influence on the greening capacity of FDI. In a context where multinationals serve markets with different environmental standards, it may be costly to design products to different standards across markets. Export-oriented FDI intended for markets with more stringent environmental regulations will tend to satisfy higher environmental standards. That way, standards tend to diffuse to countries with less stringent environmental regulation (Zarsky and Gallagher 2008). A number of statistical studies have examined the influence of environmental regulation on firm location choice, to test the significance of the pollution haven hypothesis (i.e. FDI seeks locations with weak regulations). While they cannot completely reject the hypothesis that increased regulation may, in some specific instances, shift the location of production, most studies have found little support for widespread, systematic pollution haven effects. For Neumayer (2001), the evidence for pollution havens is ―relatively weak at best and inconclusive or even negative at worst. Eskeland and Harrison (2003) found that foreign investment does not flow disproportionately into highly emitting industries.

According to OECD (1999b), while there are site- and industry-specific examples of pollution haven effects, there ―does not appear to be evidence corroborating the pollution haven hypothesis. However, Henna (2010) finds that the U.S. Clean Air Act Amendments have led to a small increase in U.S. multinationals foreign investment, consistent with the pollution-haven hypothesis. In an empirical reexamination of FDI flows between 27 source OECD countries and 99 host countries over the period 2001- 2007, OECD (2011b) finds that relatively lax environmental standards in the host country has a statistically significant positive effect on incoming FDI flows. This effect tends to exhibit an inverse U-shape, meaning that below a certain level of environmental stringency, the country loses its attractiveness as an FDI location. Overall, even when some support for the pollution haven hypothesis is found, the effects are usually described as small (Levinson 2009, Henna 2010, and OECD 2011). In addition to the impact of regulation, a number of governments have chosen to directly encourage green FDI by providing specific investment incentives, including subsidies. As an example, the German government both provides direct subsidies for the construction of renewable energy plants and requires power companies to pay a fixed rate to third parties which feed power back into the grid, making location in Germany attractive to foreign firms (Boston, 2009). Bakker (2009) identifies several major categories of tax incentives and provides a detailed compendium of policies for thirteen countries. Beyond the stringency of regulation and the existence of specific green investment incentives, investors regard an unpredictable and opaque regulatory framework as an additional risk. OECD (2010b) highlights the cost associated with frequently changing policy conditions, including the decrease in innovation in environmental technologies associated with uncertain environmental policies. The evidence suggests that foreign investors (as investors in general) favour ―transparency, accountability and predictability in the design and implementation of investment and environmental policies and regulations‖ (OECD 1999). The survey findings in OECD (2010) support the view that foreign investors favour predictable and transparent regulations regarding GHG emissions rather than the current fragmentation of regulation, especially for those companies that are at the forefront of climate-change-related innovation. Reciprocally, lack of transparency or the perception of arbitrary administrative decisions (including in the application of

environmental regulations) have deterred environmentally friendly FDI in a number of countries, including in Russia (OECD 2008a, OECD 2011a).

In conclusion, FDI has the potential to contribute to the green growth objectives of countries as a source of much needed financing and a vector of know-how transfer between economies. However, the magnitude of this contribution is largely unknown owing to the lack of a common understanding of how to define and measure —green FDI. There is nevertheless growing interest among countries in assessing the contributions of green activities to output, employment, and trade and in quantifying and monitoring countries' efforts to promote green growth, as notably recently illustrated by the OECD Green growth strategy. Such analysis requires a definition of green activities and the development of related indicators. Defining green is not a simple task. As OECD (2010) notes, EGS defy a simple statistical categorization, and the available estimates differ greatly and are based on inconsistent concepts.

Despite the difficulty, the environmental dimension has been part of policy discussions on ODA for decades, and statistics on aid to environment have been collected since the 1980s. Similarly, efforts to define trade in EGS also date back to the 1990's. Lessons can be learnt from this experience. The task is difficult for several reasons. First, many goods and services have multiple uses, some of which are green and other not (e.g. test tubes, pumps). In addition, one firm may produce a variety of products, only some of which are green. In assessing the U.S. green industry, Becker and Shadbegian (2009) defines environmental product manufacturers as firms that had produced an environmental good within the last year. Most importantly, particularly for FDI, green economic activity is often not associated so much with a particular good or service, but rather with a process or technology, which is very difficult to apprehend statistically. There is an important greening role for FDI in sectors and industries that are not environmental by nature but where the potential for pollution abatement is important. The latter dimension would not be captured if the definition was limited to investment in EGS. This leads below to a two-part definition of green FDI to cover both FDI in green industries and services and FDI in environmental processes.

2.10. Foreign Direct Investment's Implications

2.10.1. Environment and Climate Goals

Recognition of the serious threats posed by global warming and environmental degradation has elevated the issue of how to promote green growth to the top of the policy agenda at OECD and elsewhere (OECD 2009a, OECD 2010d). Green growth is defined by the OECD as the pursuit of economic growth and development, while preventing costly environmental degradation, climate change, biodiversity loss and unsustainable natural resource use.1 In particular, a key issue is how to scale up the financing and foster the dissemination of environmentally-sound technology and practices in developing countries, which host vital ecosystems and account for a rising share of global emissions of greenhouse gases (GHG) and other pollutants, yet may have limited means for financing environmental preservation and pollution mitigation. The Clean Development Mechanism (CDM) that grew out of the Kyoto Protocol is an example of a global initiative to promote green growth that involves developing countries. Much attention has also been focused on how trade liberalization in green goods can contribute to green growth (OECD 2005). Liberalization of trade in environmental goods and services (EGS) has been accepted as a goal of the Doha round of trade negotiations and highlighted in the Interim Report of the OECD Green Growth Strategy (OECD, 2010) as important. Until recently, however, relatively little attention has been paid to the role of FDI as a contributor to green growth. FDI can nevertheless potentially play a very important role for two reasons. First, the scale of FDI and its significant growth over the last decades make it a crucial source of financing. Looking at climate-change relevant financial flows from developed to developing countries, Buchner, Brown, Corfee-Morlot (2011) note that FDI is the largest source of financing across all public and private sources. Also, whereas trade has largely indirect effects, FDI has the potential to transfer environmentally-friendly industries, technology and practices that directly contribute to environmental progress.

Although green technology transfer can occur between any two countries, it is of particular relevance for dissemination of technology to developing countries. The technical know-how for controlling pollution resides primarily in firms in more developed countries, and this knowledge can be disseminated to less-developed countries through FDI (Popp 2009) both to affiliates and to domestic suppliers and customers of the multinational enterprises. One explanation for the limited attention to the possible contribution of FDI is the lack of an operational definition of green FDI. This paper identifies a number of issues that make the task of defining green FDI difficult. Many goods and services have multiple uses – some of which are green and others not, and firms may also produce a variety of products, only some of which are green. Most importantly, green economic activity is often not associated so much with a particular good or service, but rather with a process or technology, which is very difficult to apprehend statistically. Finally, the current industry-level reporting of national FDI statistics does not match up with existing efforts to define and classify green. The need to better define and measure the scale of FDI in support of green policy goals is nevertheless steadily growing. The growing interest among countries in assessing the contributions of green activities to output, employment, and trade

and in quantifying and monitoring countries 'efforts to promote green growth is illustrated by recent efforts by OECD countries to develop a green growth strategy, with corresponding monitoring indicators as a key pillar. More specifically, tracking trends and enhancing accountability and transparency of financial flows have been the focus of recent Conferences of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), as necessary complements to the ambitious emission reduction targets, actions and financial commitments taken by countries as part of the Copenhagen Accord and Cancun Decisions.

Discussions within the climate change policy community increasingly focus on the system to measure, report and verify (MRV) the financial flows that can help developed countries meet their collective commitment to provide new and additional funding to developing countries, including the potential contribution of private finance (see the recent work of the Climate Change Expert Group). Similarly, among the decisions taken by the Conference of the Parties to the Convention on Biological Diversity to achieve the "Aichi Biodiversity Targets", one relates to a strategy for resource mobilization which relies on various funding sources, including from the private sector. In this general context, improving the understanding of what can be defined as a green investment and strengthening the statistical foundation for measurement would help policy makers to better track the scale and trends of financial flows in support of green growth policy goals. Short of directly controlling the allocation of private investment flows, governments would then be in a better position to assess the adequacy and effectiveness of their policies in providing a conducive framework for green investment and to evaluate the leverage effect of public funds to incentivize this type of investment. Against this backdrop, this paper was developed at the request of the Working Party of the OECD Investment Committee at its meeting of March 2010 to initiate work on defining and measuring green FDI. It is an exploratory study summarizing existing work by OECD and others, investigating the practicability of various possible definitions of green FDI, and identifying associated investment policy restrictions. It is meant to review the limited existing evidence on green FDI in order to trigger discussions and further work on this issue. In this perspective, Part II of the paper provides a brief overview of the state of knowledge of the environmental effects of FDI in the context of the broader international efforts to promote green growth. Part III addresses the definition of green FDI and proposes a two-part definition:

- FDI in environmental goods and services (EGS); and
- FDI in environmental-damage mitigation processes, i.e. use of cleaner and/or more energy-efficient technologies. Reviews the existing data on green FDI and attempts to evaluate the magnitude of the two parts of the proposed definition and associated restrictions of the literature on the statistical and qualitative evidence of the impact of FDI on the environment.

2.10.2. Understanding the Contributions of FDI to the Environment

As a category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy in an enterprise in another country, FDI provides a means for creating direct, stable and long-lasting links between economies. In particular, international investment constitutes a vital source of private financing and a vector of know-how or technological transfer between economies. In the absence of systematic data on the level and trends of FDI that contributes to green growth objectives, analysis of the environmental effects of FDI have mainly been based on case studies.

3. Theoretical framework

3.1. The Entrepreneurs' Knowledge Spillover Theory

The Knowledge Spillover Theory of Entrepreneurship (KSTE) was developed by Audretsch (1995) in his seminal work. It extends the endogenous growth theory by emphasizing the role of entrepreneurs as channels for knowledge spillovers during the process of knowledge commercialization (Audretsch and Belitski, 2013; Grossman and Helpman, 1991; Lucas, 1988, 1993; Romer, 1986, 1990). As a result, according to Audretsch and Keilbach (2007), the KSTE enables a more nuanced perspective on where entrepreneurial ideas first emerged. Since its creation, the KSTE has drawn a lot of interest and has been used, for example, to study economic growth (Audretsch et al., 2006), absorptive capacity (Acs and Plummer, 2005; Qian and Jung, 2017; Proeger, 2020), entrepreneurial ecosystems (Jones and Ratten, 2020), company alliances (Shu et al., 2014), or sustainable entrepreneurship.

This theory fit into the underlining concept of this research paper and it's the foundation theory of this study because the idea explains why knowledge is a major determining factor why some individuals act while others choose to do nothing and when an entrepreneurial opportunity arises, just like any other theory of entrepreneurship. The hypothesis is predicated on premise that economic possibilities from knowledge spillovers drive entrepreneurship. People create their own businesses because they can benefit from knowledge spillovers. Entrepreneurial opportunity, which

subsequently fuels knowledge spillover entrepreneurship, is specifically created by the possibility of profiting from a knowledge spillover. As a result, it combines conventional entrepreneurship theory to the theory and literature on knowledge spillovers by focusing on entrepreneurial behavior within the setting of knowledge spillovers. The conventional theoretical framework that has been well-established across the academic literature on entrepreneurship has been concentrated on the importance of opportunities, both in terms of identifying or generating them and in terms of seizing or taking advantage of them.1 An entrepreneurial opportunity is defined as "a set of ideas, beliefs and actions that enable the creation of future goods and services in the absence of current markets for them," according to Sarasvathy et al. (2003, p. 142). They divide business prospects into three categories: opportunity identification, opportunity discovery, and opportunity creation. The setting from which decisions are made can affect a person's decision to become an entrepreneur, according to the knowledge spillover hypothesis of entrepreneurship. In particular, these principles lead to entrepreneurial potential in a knowledge-rich environment. The entrepreneur (human capital) serves as a conduit for knowledge spillover as well as for the ensuing innovative activity and improved economic performance through resource allocation by turning ideas that originated from an established organization into a new firm.

3.2. The Theory of Exchange Rates on Imperfect Capital Markets

Another idea that attempted to explain Foreign Direct Investment (FDI) is this one which is also the foundation of this study. The foreign exchange risk was initially examined from the standpoint of global trade. Itagaki (1981) and Cushman (1985) examined how uncertainty affected foreign direct investment. Cushman's one and only empirical research to date demonstrates that while a foreign currency appreciation has decreased American FDI, a real exchange rate gain promoted FDI made by the USD. According to Cushman, there has been a 25% decline in U.S. FDI as a result of the strengthening of the currency. The simultaneous foreign direct investment between nations using several currencies, however, cannot be explained by the currency risk rate hypothesis. There are numerous instances to refute the sustainers' claims that these investments are made at separate periods.

3.3. The Theory of Internalization

This theory aims to explain the development of multinational corporations and the drivers behind their pursuit of foreign direct investment. In 1976, Buckley and Casson first formulated the theory, followed by Hennart in 1982 and Casson in 1983. The idea was first introduced by Coase in a national setting in 1937 and Hymer in an international one in 1976. Two key factors of Foreign Direct Investment (FDI) were found by Hymer in his doctoral dissertation. One was the elimination of rivalry. The other was the competitive advantages some businesses have in a given industry (Hymer, 1976). The idea was developed by Buckley and Casson, who show how multinational corporations structure their internal operations to create certain advantages that may later be utilized. Dunning also believes that internalization theory is crucial and incorporates it into his eclectic theory, but he also asserts that this only partially explains FDI flows. Hennart (1982) expands on the concept of internalization by creating models that contrast the vertical and horizontal forms of integration. Hymer, who created the idea of firm-specific advantages, shows that FDI only happens when the advantages of utilizing these advantages surpass the relative costs of conducting business overseas. According to Hymer (1976), the MNE manifests as a result of market flaws that prevented the end product market from experiencing ideal competition. According to Eden and Miller (2004), Hymer has explored the issue of information costs for international enterprises compared to domestic firms, differing treatment of governments, and currency risk. The outcome implied the same conclusion: multinational corporations incur certain adjustment costs when making foreign investments. Hymer understood that FDI is a firm-level strategic choice rather than a financial one based on the capital markets.

3.4. Summary of Gap in Literature

To draw a nexus between Foreign Direct Investment and the Knowledge Entrepreneurship in the period (2022-2023) under study, it is pertinent to state that the concept of foreign direct investment and the knowledge entrepreneurship has witnessed a paucity of literature. There is no literature linking both of them. There are more literature on Foreign Direct Investment and paucity of literature on knowledge entrepreneurship. This research paper therefore, is unique and novelty in every sense and it will raise the frontiers of knowledge in the emerging field of knowledge entrepreneurship. This paper will trigger a new debate amongst scholars on knowledge entrepreneurship. Buckley, (2002) stated that FDI enhanced capital accumulation. Schoors et al, (2002) believed that FDI is to improve efficiency of the locally owned firms (SMEs). Broadly speaking, the efficiency of firms in the host economy is supposed to be increased in direct and indirect ways. Though by the direct effect it meant that FDI will contribute to the productivity of the sector in which a foreign firm operates based on knowledge entrepreneurship. Amidst the tremendous benefit of Knowledge Entrepreneurship, some scholars are of the opinion that there is positive effect on Foreign Direct Investment. They believe that whenever capital inflows are large, they may have less desirable macroeconomic effects, such as "… rapid monetary expansion, inflationary pressures, real exchange rate appreciation and widening current

account deficits". They also warn that FDI movements tend to possess some cyclical components. In the case of developing countries, FDI may lead to "booms and busts in capital inflows. Most of the scholars asserted that openness to FDI contributes to economic growth in third world countries (Sachs and Warner, 1995; Morgan and Wright, 2002; Frankel and Romer, 1999; Utkulu and Ozedemir, 2014).

4. Research Methodology

The researcher used descriptive research survey design in for this paper. Qualitative and quantitative methods of data collection were used in this study because it is used to obtain in-depth information and concept clarification as to facilitate instrument designs. Quantitative method is more useful when used to interpret, illuminate and extract valued information so as to draw inferences from the available evidence to reach conclusion. Our secondary data was basically sourced from textbooks, internet, articles, journals, conference papers, institutional documents and also from the review of extent literature while our primary data was sourced from structured questionnaires of some selected FDI. Population of study are made up of 133 staff of selected FDI in Nigeria was selected randomly by the researcher as the population of the study.

5. Results

The researcher printed and distributed 133 questionnaires, but only 120 were perfectly answered and returned which is about 90% return rate and this was used for the study. Consequently, the responses of the 120 questionnaires were subject to different statistical analysis and results presented in table formats and percentage for easy understanding. Research question and test of hypothesis was analyzed using multiple regression and correlation approach using SPSS version 20. The data collected for the study were analyzed quantitatively using inferential statistics of frequency, percentage and mean. The mean of the Likert scale was set at 2.50 cut-off; it was easy to determine the extent to which respondents agreed or disagreed with a given opinion on the issues surrounding Unemployment and how entrepreneurship approach perceived as job creation solution.

5.1. Analysis of Research Questions

Department "A": Personnel Data of Respondents

Table 3 Age distribution of respondents

Age	No. of Respondents	Percentage%
18-28yrs	35	29.16
28-38yrs	42	35
38-48yrs	23	19.17
48-58yrs	20	16.67
Total	120	100

Source: Field survey 2023

Table 4 Academic qualification of respondents

Academic Qualification	No of Respondents	Percentage%
SSCE	40	33.33
NCE/OND	30	25
HND/B.SC	35	29.17
MSC	15	12.5
PhD	-	-
Total	120	100

Source: Field survey 2023

Here, the table format indicates that within the age bracket of 18-28yrs of age, were 35 respondents, representing 29.16%, between the ages of 28-38, were 42 respondents, representing 35% while 38-48yrs, has 23 persons, which represents 19.17% whereas 49 and above, were 20 respondents, which stands for 16.67%, this is the statistical presentation and analysis of the data involved in the age distribution table.

Upon the demonstration of data analysis, it is an honest information that 40 respondents were holders of SSCE certificate, representing 33.3%, NCE/OND pulled respondents, which represent 25%, HND/BSC has 35 respondents, which scores 29.17% while MSC certificate holders were 15, which is a representation of 12.5% whereas PhD certificate, could not produce any respondent and percentage. The table shows the statistical result of academic qualification distribution table of the study.

5.2. Analysis of Research Questions

Department "B":

Research question 1: What are the contributions of Knowledge Entrepreneurship to foreign investment in Nigeria? Research question one was answered with questionnaire item 1, 2, 3 and 4

Table 5 To ascertain the contributions and extent of Impact of Knowledge Entrepreneurship to foreign investment in Nigeria

S/N	Items of the questions	SA	A	SD	D	UND	Mean
1	Knowledge Entrepreneurship has a positive impact to the growth of foreign direct investment in your firm and in Nigeria	45 (37.5)	40 (33.33)	10 (8.33)	20 (16.67)	5 (4.17)	3.76
2	Knowledge Entrepreneurship is a viable business model in Nigeria	50	40	11	10	9	
3	Your firm practice knowledge entrepreneurship and it has resulted in technological transfer to your host economy	50 (41.67)	33 (27,5)	17 (14.17)	9 (7.5)	11 (9.16)	3.75
4	Knowledge entrepreneurship has boosted the operations of your FDI through market share and increased profitability of your firm and create employment opportunity for the host economy.	17 (14.17)	50 (41.67)	33 (27.5)	11 (9.16)	9 (7.5)	3.05
5	Exchange rate volatility and insecurity in Nigeria is a major challenge of Foreign Direct Investment in Nigeria	30 (25)	25 (20.83)	10 (8.33)	20(15)	15(12.83)	3.29

Source: Field survey 2023

Note: Figures in parenthesis are percentages: (SA = strongly agree; A = Agree; D = Disagree; SD= strongly disagree and UND = Undecided)

From Table 3, the response to item 1 show that 37.5% strongly agreed, 33% agreed 8.3% strongly disagreed, 16.7% disagreed and 4% where undecided. The mean response of 3,76 implies that the respondents totally agreed with the construct. In item 2, it show that 41.6% strongly agreed, 27.5% agreed 14% strongly disagreed, 7.5% disagreed and 9.1% where undecided. The mean response of 3,75 is significant and implies that the respondents totally agreed with the construct.

In item 3, the result show that 14.17% strongly agreed, 41.6% agreed 27.5% strongly disagreed, 9.2% disagreed and 7.5% where undecided. The mean response of 3, 05are significant and imply that the respondents totally agreed with the construct.

In item 4, the result show that 25 % strongly agreed, 20.8% agreed 8.3% strongly disagreed, 15 % disagreed and 20.8% where undecided. The mean response of 3.29 is significant and implies that the respondents totally agreed with the construct.

From the general response it is clear that all response is above 2.5 cut-off and hence respondents agreed that Knowledge Entrepreneurship has positive effect on Foreign Direct Investment in Nigeria.

5.3. Testing of hypothesis

Hypothesis testing will be carried out in the order below: Statement of hypothesis, result of analysis, comparing result with decision rule, validating the hypothesis to accept or reject.

5.3.1. Statement of Hypothesis

Test of Hypothesis One

H_1 There is positive and significant impact of Knowledge Entrepreneurship on Foreign Direct Investment in Nigeria.

In testing the above hypothesis we use the result of simple linear regression between Knowledge Entrepreneurship and Foreign Direct Investment.

Table 6 To ascertain the nature of impact of Knowledge Entrepreneurship and Foreign Direct Investment in Nigeria

Model Summary					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.990[a]	0.980	0.979	0.55833	1.344

a. Predictors: (Constant), X4, X2, X3, X1; b. Dependent Variable: Foreign Direct investment

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	1713.317	4	428.329	1374.005	0.000[b]
	Residual	35.850	115	0.312		
	Total	1749.167	119			

a. Dependent Variable: Foreign investment; b. Predictors: (Constant), X4, X2, X3, X1

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	0.688	0.164		4.192	0.000
	X1	1.330	0.154	0.463	8.618	0.000
	X2	0.906	0.136	0.337	6.641	0.000
	X3	0.044	0.094	0.017	.474	0.636
	X4	0.570	0.107	0.195	5.336	0.000

a. Dependent Variable: Foreign investment Source: SPSS Result output (Version 20)

6. Results and Discussion

The result of the analysis indicated that there is a significant (P0.000<0.05) relationship between Knowledge Entrepreneurship and foreign direct investment. From model summary, R is 0.990, R^2 is 0.980, adjusted R^2 is 0.979, p-value 0.000 and F-stat. 1374.00. The result indicated that with R2 0.980 implies that 98% variation in foreign direct investment is accounted for by changes in the number of Knowledge Entrepreneurship. All these include items/construct for foreign direct investment are significant and positively signed except item 3(the escalating rate foreign investment) that was not significantly (P0.635> 0.05, 0.044) affected by Knowledge Entrepreneurship.

From the estimated parameters, there is a robust relationship between the dependent variable (Foreign Direct Investment) and the independent variables: Knowledge Entrepreneurship (P0.000<0.05, 1.330), Knowledge Entrepreneurship contribution to FDI profitability and market share (p 0.000<0.05, 0.905) and providing solution foreign Direct investment challenges P 0.000<0.05, 0.057)

Since the p-Value of our regression result 0.000<0.05, by applying the decision rule, we reject the null hypothesis, that there is no significant relationship between Knowledge Entrepreneurship and foreign Direct investment and accept the alternative. We accept the alternate hypothesis that there is positive and significant relationship between Knowledge Entrepreneurship and foreign direct investment in Nigeria.

7. Conclusion

The result indicates that Knowledge Entrepreneurship has a positive and significant impact on foreign direct investment in Nigeria. This result is in tandem with The Knowledge Spillover Theory of Entrepreneurship (KSTE) developed by Audretsch (1995) which extends the endogenous growth theory by emphasizing the role of entrepreneurs as channels for knowledge spillovers during the process of knowledge commercialization. This means that the knowledge of Foreign Direct Investment opportunity in another country will accelerate the action of the entrepreneur in taking advantage of the opportunity to make profit.The study also found that knowledge entrepreneurship has resulted in technological transfer to Nigeria, employment generation as well as increased profitability and market share of the FDI operating in Nigeria. Knowledge entrepreneurship has been found with the potency of attracting foreign direct investment hence the positive and significant correlation. The study concludes that knowledge entrepreneurship is a viable business model in Nigeria and that the reason for the massive and downward sliding of Foreign Direct Investment in Nigeria currently is as a result of the national challenges of high insecurity and exchange rate volatility.

Recommendations

This study recommends that there should be further studies on knowledge entrepreneurship which is an emerging field of study.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

[1] Aitken, B., Hanson, H.G. & Harrison, A.E. (1997), Spillovers, foreign investment, and export behaviour, Journal of International Economics, 43,103-132.

[2] Aitken, B.J. & Harrison, A.E. (1999), Do domestic firms benefit from direct foreign investment? Evidence from Venezuela, American Economic Review, Vol. 89, No. 3, 605–618.

[3] Aldaba, R.M. &Aldaba, F.T. (2010), Assessing the spillover effects of FDI to the Philippines, Discussion Paper Series, No.27, November.

[4] Alfaro, L. & Rodríguez-Clare, A. (2004), Multinationals and linkages: An empirical investigation, Economia, 113–169.

[5] Blomström, M. & Ari Kokko, A. (1996), The ımpact of foreign ınvestment on host countries: a review of the empirical evidence,http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-1745

[6] Blomström, M. &Kokko, A. (1998), Multinational corporations and spillovers, Journal of Economic Surveys 12(2), 1-31.

[7] Blomstrom, M., Globerman, S. &Kokko, A. (1999), The determinants of host country spillovers from foreign direct ınvestment: review and synthesis of the literature, SSI/EFI Working Paper Series in Economics and Finance, No.76.

[8] Borensztein, E., Gregorio, J.D. & Lee, J.W. (1998), How does foreign direct investment affect economic growth?, Journal of International Economics, Vol. 45, pp. 115–135.

[9] Chukwuka, E.J, & Imide. I.O, (2023), Role of Small and Medium Sace Enterprises in boosting Foreign Direct Investment in Nigeria, Jalingo Journal of Social and Management Sciences, Vol,4(4), 94-105.

[10] Imide, I.O, & Chukwuka, E.J. (2022), Assessing the Strategic Effect of Small and Medium Scale Enterprises on Economic Development: Evidence from Delta State, Fu-wukari Journal of Banking and Financial Studies, Vol, 2(2), 151-164.

[11] Chukwuka, E.J. & Amahi, U. (2021) Entrepreneurial potentials of Covid-19 vaccination. International Journal of TROPICAL DISEASE & Health 42(15) 37-52

[12] Clerides, S.K., Lach, S. & Tybout, J.R. (1998), Is learning by exporting ımportant? Micro-dynamic evidence from Colombia, Mexico, and Morocco, Quarterly Journal of Economics, 113, pp. 903-947.

[13] Colen, L, Maertens M. & Swinnen, J. (2008), Foreign direct investment as an engine for economic growth and human development: a review of the arguments and empirical evidence, Working Paper No. 16 - September 2008, Prepared for the IAP P6/06 Project, Working Package FDI-1 LICOS

[14] Corden, W.M. (1967), Protection and Foreign Investment, Economic Record, Vol. 43, 209- 232.

[15] Costa, I. & de Queiroz, S. (2002), Foreign direct investment and technological capabilities in Brazilian industry, Research Policy 31 (8–9), 1431– 1443.

[16] De Mello, L. (1997), Foreign direct ınvestment in developing countries: a selective survey, The Journal of Development Studies, 34(1), 1-34.

[17] Djankov, S. &Hoekman, B. (2000), Foreign investment and productivity growth in Czech enterprises, World Bank Economic Review, Vol. 14, No. 1, 49–64.

[18] Duan, C. (2009), FDI and economic growth in developing countries: The growth effects of vertical, horizontal and Export-platform FDI, Erasmus University of Rotterdam International Economics and Business, 1-50.

[19] Dunning, J.H. (1992), The global economy, domestic governance, strategies of transnational corporations: ınteractions and policy implications, Transnational Corporations, 1(3), 7-46.

[20] Findlay, R. (1978), Relative backwardness, direct foreign investment and the transfer of technology: A simple dynamic model, Quarterly Journal of Economics, 92, 1-16.

[21] Fosfuri, A., Motta, M. &Rønde, T. (2001), foreign direct ınvesment and spillovers through workers' mobility, Journal of International Economics, 53,.205-222.

[22] Girma, S., Greenaway, D. & Wakelin, K. (2001), Who benefits from foreign domestic investment in the UK, Scottish Journal of Political Economy, Vol. 48, No. 2, 119–133.

[23] Girma, S. (2005), Absorptive capacity and productivity spillovers from FDI: A threshold regression analysis, Oxford Bulletin of Economics and Statistics, Vol. 67, No. 3, 281–306.

[24] Glass, A.J. &Saggi, K. (2002), Multinational firms and technology transfer, Scandinavian Journal of Economics, 104, 495-513.

[25] Görg, H. &Strobl, E. (2001), Multinational companies and productivity spillovers: A meta-analysis, The Economic Journal, Vol. 111, No. 475, F723–F739.

[26] Greenaway, D., Sousa, N. & Wakelin, K. (2004), Do domestic firms learn to export from multinationals? European Journal of Political Economy, 20,1027-1043.

[27] Haskel, J.E., Pereira, S.C. & Slaughter, M.J. (2002), Does inward foreign direct investment boost the productivity of domestic firms, NBER Working Paper, 8724.

[28] Javorcik, B. S. (2004), Does foreign direct ınvestment ıncrease the productivity of domestic firms? ın search of spillovers through backward linkages, The American Economic Review, 94(3), 605-627.

[29] Keller, W. &Yeaple, S.R. (2003), Multinational enterprises, international trade and productivity growth: Firm level evidence from the United States, NBER Working Paper 9504.

[30] Koizumi, T. &Kopecky K.J. (1977), Economic Growth, Capital Movements and the International Transfer of Technical Knowledge,? Journal of International Economics, 7, 45-65.

[31] Konings, J. (2001), The effects of foreign direct investment on domestic firms, Economics of Transition, vol. 9, no. 3, 619–633.

[32] López-Córdova, J.E. (2003), NAFTA and manufacturing productivity in Mexico, Economia, Vol. 4, No. 1, 55–98.

[33] MacDougall, G.D.A. (1960), The benefits and costs of private ınvestment from abroad: a theoretical approach, Economic Record, Vol. 36, 13-35.

[34] McDonald, R. E. (2002). Knowledge entrepreneurship: linking organizational learning and innovation. University of Connecticut

[35] Markusen, J. R. &Venables, A.J. (1999), Foreign direct investment as a catalyst for industrial development, European Economic Review, 43 (2), 335-356.

[36] Nicolini, M. &Resmini, L. (2006), The impact of MNEs on domestic firms in CEECs: A micro-econometric approach, Presented at the ETSG conference in Vienna, 7-9 september.

[37] Senge, P. M. (1990). The fifth discipline : the art and practice of the learning organization (1st ed.). New York: Doubleday/Currency.

[38] Senges, M. (2002). Nutzung von NeuenInformations und Kommunikations Technologienzur Wissensvernetzung. TFH Wildau, Wildau

[39] Senges, M. (2006). Reseña del libro Challenging Knowledge. The University in the Knowledge Society, de Gerard Delanty [reseña en línea]. Revista de Universidad y Sociedad del

[40] Conocimiento (RUSC) Retrieved 10.Sept., 2007, from http://www.uoc.edu/rusc/2/2/dt/esp/senges.pdf

[41] Skrzeszewski, S. (2006). The Knowledge Entrepreneur: Scarecrow Press

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