BANKING SECTOR STABILITY AND FOREIGN DIRECT INVESTMENT INFLOWS IN GHANA

By

WILLIAM ASANTE (BSc. Administration - Accounting**)**

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DECLARATION

I hereby declare that this submission is the results of my own work towards the Masters of Science (Accounting and Finance Option) programme and that to the best of my knowledge, this study contains no materials previously published by no person or submitted for the award of any other degree of the University, except where acknowledgement has been duly made in the text.

Williams Asante	……	……..…….
(Name and PG7224119)	Signature	Date

Certified by:

Mr. Richard Owusu-Afriyie	...…….....	…….……
(Supervisor)	Signature	Date

Certified by:	……..……	……
Dr. Daniel Domeher	Signature	Date
(Head of Department)		

DEDICATION

This work is dedicated to my lovely wife Mary Asantewaa Kumi and Children (Lois Bemponma Asante, Gerald Gyan Asante, and Mirabel Asantewaa Asante for their unfailing supports, encouragement and always believed in me.

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ABSTRACT

FDI inflows into developing countries serve as invaluable tool in catapulting developing countries into economic growth. Nonetheless, it is important to note that attracting FDI into a country requires more than just verbal rhetoric but a conscious effort to put in place pragmatic policies and strategies to pull foreign investors from the competitive world of business. Essentially this study has looked how the stability of the banking sector affects FDI inflows into the Ghanaian economy. The study specifically sought to examine the link between banking sector stability measure by three core indicators, namely capital adequacy, ROA, and liquidity and FDI inflows in Ghana. The study employed the quantitative research approach based on the explanatory type of study. The study used secondary data covering a period of 10 years from 2009-2018 which was analyzed with the help of STATA statistical software. The study found that capital adequacy (CA) and liquidity (LIQ) measures of banking sector stability have fairly weak negative relationship with FDI inflows but ROA and FDI inflows are positively related. The study then concludes that even though improvement in ROA of the banking sector leads to increase in FDI inflows that are not the case with capital adequacy and liquidity of the banking sector even though they remain an indispensable part of ensuring an efficient, effective, and robust banking sector. The study therefore recommends that policy makers and key stakeholders develop and implement necessary measures to continually improve the ROA of the sector since banks play a critical role of investment and international transfer transactions for foreign investors. Also, re policy makers should take steps to strengthen the capacity of the sector with regards to its capital adequacy and liquidity indicators since they are indispensable elements in ensuring efficient and robust banking sector which is a major concern for foreign investors.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Advancement in technology and globalization has resulted in the increased foreign direct investment (FDI) across the world. Given the significant role FDI play in the economic development of nations globally, governments across the world continually put in place structures to attract FDI inflows into their countries to enhance stability of their countries' economies (Coy and Comican, 2014). In very simple terms, FDI refers to an arrangement whereby investors outside of a particular country's jurisdiction undertake investment in entities in the foreign country with high or significant level of control or influence (Solomon, 2011).

According to a working definition by the World Bank, an FDI basically relates to the investment in assets of an entity either as a start-up entity from the scratch or the acquisition of an already existing entity by owning significant level of control or influence by investors who are not residents or citizens of the country within which the entity operates. This means that FDI net inflows encompass the value of net direct inflows by non-resident investors of the reporting country. It is worth mentioning that FDI under all circumstances has become an important vehicle in the internationalization of investment activities in the global economy.

Notwithstanding the boom in global FDI over the past decade, it must be underscored that the global FDI flows decreased by 13 percent in 2018 to $1.3 trillion from the prior year figure of $1.5 trillion (UNCTAD World Investment Report, 2019). A close observation from the figures show this decline is the third consecutive fall in the global

FDI figures since the year 2016. The trend of decline in the global figures have had a rippling effect on the FDI inflows to West Africa and Ghana as well with both the West African sub-region and Ghana declines recording a third consecutive fall just like the global situation. Per the figures available, the FDI inflows to the West African sub-region and Ghana in the year 2018 decreased from the year 2017 figure by 15 percent and 8 percent respectively (UNCTAD World Investment Report, 2019).

From all indications FDI serves as an invaluable source of external finance to boost economic development. This is because it is found to be non-debt creating, less volatile, and facilitate transfer of knowledge, skills, and technology (Bhasin, 2012). Governments across the globe, especially in developing countries like Ghana have persistently put in place various fiscal and non-fiscal measures to attract FDI. Although programmes meant to entice FDI inflows are good, they may not be ends in themselves but rely on both economic and non-economic conditions in the economy to fully materialize. Notwithstanding the relevance of various economic and social indicators in attracting FDI inflows, it must be emphasized that the banking sector plays an integral part of businesses as significant business transactions can only take place with the presence of a stable banking sector. Hence, the stability of the banking sector is very essential in attracting FDI in every economy.

Particularly with to Ghana, the stability of the banking sector is very crucial for FDI inflow given the government flagship programme of one district one factory (1D1F), which scores of stakeholders have argued would enhance the success of the progamme. Nonetheless, studies on the banking sector stability and FDI inflow nexus in Ghana seems to be ignored in the vast literature on the topic of FDI. For instance, studies on

FDI inflows in Ghana such as Frimpong and Oteng-Abayie (2006) study on the causal link between FDI and GDP growth for Ghana for the pre- and post-SAP periods using the granger no-causality test; Nyarko, Nketiah-Amponsah, and Barnor (2011) explore the effects of exchange rate regimes on FDI inflows in Ghana using the ordinary least square regression technique; and Insah (2013) examine FDI inflows and economic growth in Ghana employing the Engle-granger two step methodology for error correction and the dynamic ordinary least square regression technique.

Again, Armah (2016) pursue a study on infrastructure and foreign direct investment inflows in Ghana which examine the relationship between economic infrastructure and FDI on one hand, and social infrastructure and FDI on the other using the two stage least square estimation technique while Asiamah, Ofori, and Afful (2019) investigate the analysis of the determinants of foreign direct investment in Ghana using the Johansen's approach of cointegration within the framework of vector autoregressive for the data analysis. It is glaring from the literature review discussion above and best of the researcher's knowledge that there is paucity of research in Ghana which seeks to examine the relationship between banking sector stability and FDI inflows in Ghana. To this end, this study is pursued to address this gap in research.

1.2 Problem Statement

Globalization has resulted in tremendous growth in international investments and trade in the last two decades. This has led to strong competition among countries in attracting international investment by adopting several macroeconomic measures to boot foreign direct investment. (FDI). According to Bhasin (2012), FDI is more preferred to other form of external finance since they are non-debt creating, less volatile, and facilitate

transfer of knowledge, skills, and technology. Ghana like several other developing countries face a challenge in mobilizing sufficient revenue to execute its development agenda. This has resulted in recurring budget overrun in the successive fiscal years. For instance, the country recorded a budget deficit which averaged 3.8% of GDP in 2018 and a debt to GDP record was 59.3% during the same year (Bank of Ghana, 2019). With the limited tax revenue which compel the government seek external funding and its consequent budget deficits, the government have implemented several programmes to attract FDI into the country. It is evident that FDI's inflows into the country have increased tremendously.

With the government flagship programme of One-District-One-Factory (1D1F), there are clear indications that FDI is indispensable for the complete achievement of the ID1F programme, which is seen as a vehicle for job creation and economic development. Notwithstanding the significance of the ID1F industrialization drive which scores of stakeholders have argued FDI inflows will substantially enhance its achievement, there are anecdotal accounts of concerns that the recent turbulence in the banking sector may affect possible FDI inflows towards the ID1F industrialization drive which call for empirical investigation into establish the relationship between the banking sector stability and FDI inflows in Ghana.

Notwithstanding the pressing nature of the situation, none of the studies pursued in relation to FDI in the context of Ghana have explored the relationship between stability in the banking sector and FDI inflows. For instance, Frimpong and Oteng-Abayie (2006) study on the causal link between FDI and GDP growth for Ghana for the pre- and post-SAP periods using the granger no-causality test; Nyarko, Nketiah-Amponsah,

and Barnor (2011) explore the effects of exchange rate regimes on FDI inflows in Ghana using the ordinary least square regression technique; and Insah (2013) examine FDI inflows and economic growth in Ghana employing the Engle-granger two step methodology for error correction and the dynamic ordinary least square regression technique. Again, other studies such as Adams et al (2014) research on the causes of financial FDI inflows into Ghana which mainly seek to recognize foreign investors' view of how institutional investors enhance the flow of FDI into a country and the degree to which post economic adjustments has succeeded in attracting FDI inflows into the Ghana using the qualitative approach to research.

Further, Armah (2016) pursue a study on infrastructure and foreign direct investment inflows in Ghana which examine the relationship between economic infrastructure and FDI on one hand, and social infrastructure and FDI on the other using the two stage least square estimation technique while Asiamah, Ofori, and Afful (2019) investigate the analysis of the determinants of foreign direct investment in Ghana using the Johansen's approach of cointegration within the framework of vector autoregressive for the data analysis. Considering the review of literature on studies in respect of FDI inflows in above, and to the best of the researcher's knowledge, it is glaring that there is no study in Ghana which seek to examine the relationship between the stability of the banking sector and FDI inflows in Ghana. The purpose of this study therefore, is to fulfil this gap in research by examining the relationship between banking sector stability and FDI inflows in Ghana.

1.3 Research Objectives

The primary purpose which underpins the study was to examine the effect of banking sector stability on FDI inflows in Ghana. This notwithstanding, the study was guided by the specific objectives outlined below.

1. To examine the relationship between banking sector capital adequacy and FDI inflows in Ghana.
2. To examine the relationship between banking sector return on asset and FDI inflows in Ghana.
3. To examine the relationship between banking sector liquidity and FDI inflows in Ghana.

1.4 Research Questions

1. What is the relationship between banking sector capital adequacy and FDI inflows in Ghana?
2. What is the relationship between banking sector return on asset and FDI inflows in Ghana?
3. What is the link between banking sector liquidity and FDI inflows in Ghana?

1.5 Significance of the Study

It worthy of note that there have been several studies on FDI inflows in Ghana. However, research on the relationship between banks stability and FDI inflow in Ghana has been limited. Hence, this study will give a broader insight into the relationship between banking sector stability and FDI inflows in an emerging economy like Ghana, which is mostly ignored in most literatures. More importantly, it must be emphasized that the outcome of the will be beneficial to significant number of stakeholders.

However, stakeholders such as the government and policy makers, corporate and professional practitioners, as well as the researchers and scholars cannot be overlooked. Firstly, the outcome of the study will help the government to understand and appreciate the dynamics between banking sector stability and FDI inflow. This is more important to the government given the government agenda of One District One Factory, because it would enable the government to task policy makers and regulators to work at enhancing the stability of the banking sector and the entire financial system if it is found to have a positive significant effect on FDI inflows.

Secondly, for corporate and professional practitioners of banking institutions, it will propel them to work at enhancing the stability of the banking sector if a significant positive relationship is established, widespread inflow of FDI will go a long way to boost their profitability which has the tendency to improve their survival into the future. With respect corporate practitioners such as local investors who seek FDI partners for business ventures, it will enable them to know when to approach foreign investor to discuss business given the condition of the banking sector, although other economic and social indicators may be relevant. Finally, for researchers and academic scholars, it is worthy of note that this study will add to the existing body of literature on banking stability and FDIs. Therefore, it will become and good source of reference for researchers and scholars in the years ahead.

1.6 Summary of Methodology

The study used the quantitative research approach with an explanatory research perspective. Considering the nature of the study, the desk research strategy was employed. Secondary data was used for the study. The data used was time series data

on the relevant variables over a 10-year period from 2009 to 2018. Data in respect of the dependent variable which is the FDI was obtained from the World Bank Development Indicators Database while data on the independent variables was obtained from the Bank of Ghana Time Series Database. Data was analysed with the help of STATA version 15 to ascertain the link between FDI and banking sector stability by means of multiple regression analysis.

1.7 Scope of the Study

The scope regarding the study involved the contextual scope and the geographical scope. With regards to the contextual scope, the research focused mainly on the objectives of the study which was to establish the relationship between FDI and banking sector stability measured by capital adequacy, return of assets, and liquidity. Essentially, data used for the study covered a period from 2009-2018 and were sourced from the Bank of Ghana Time Series database (i.e. for independent variables) as well as the World Development Indicators database (i.e. for dependent and controlled variables). The geographical context of the study was restricted to Ghana.

1.8 Limitation of the Study

Basically, this study looked at the link between banking sector stability and FDI inflows into the Ghanaian economy. Although the researcher did not encounter key limitations in the conduct of the research, one principal limitation which prevails with the study is the restriction of the scope of the study to only the banking sector and not the entirety of the financial sector which include the stock market, capital market, and other key industry players in the financial landscape which also play critical financial intermediation role. In this respect, it is evident that the findings of the study do not

provide a true reflection of the general financial landscape of the Ghanaian economy. Hence, any attempt to generalize the outcome of the study to encompass the whole of the financial sector of the Ghanaian economy must be made with a greater degree of caution.

1.9 Organization of the Study

The study is structured into five distinct chapters. Chapter one provides information on the background to the study, problem statement, objectives of the study, research questions, relevance of the study, overview of the research methodology, scope and limitations of the study, and organization of the study. The second chapter is the review of literature and this includes the conceptual review, theoretical review, and empirical review. The third chapter focuses on methodology for the study. It highlights the research design, study population and sample size, sampling technique, data source and collection procedure, as well as data analysis. Chapter four presents the results and discussions. The final chapter which is chapter five also contains the summary of findings conclusion, and recommendations for policy and further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter thoroughly review literature in relation to the topic under consideration. Ordinarily, the review is structured into three main frameworks. These are the conceptual framework, the theoretical framework, and the empirical framework. The conceptual framework mainly deals with definition and overview of various concepts. The theoretical framework focuses on review of theories supporting the study, while the empirical review mainly provides a discussion on the outcome of prior studies related to the current study.

2.1 Theoretical Review

Several theories explain the rationale for investors to embark on FDI activities. For the purposes of this studies, two main theories are considered to look at the relationship between banking sector stability and FDI inflows. These theories are the Internalization Theory and the Capital Theory.

2.1.1 The Internalization Theory

The internalization theory as traced to Ronal Cruse in one of his articles 1937 seek to explain the behaviour of international businesses (Rugman and Collinson, 2012). One school of thought succinctly explains that internalization sets in when expected benefits outweigh the cost ((Hymer, 1976: Cited in Etim, Jeremiah, and Jeremiah, 2019). According to Kim (2011), the presence of market imperfection propels multinational companies (MNC) to select FDI locations based on potential comparative advantage(s) which enable them to minimize risk and retain significant market share. It is the

contention of this study that financial instability discourages FDI inflow into an economy. This is because, investors as rational as rational and profit seeking people tend to deploy resources to other countries as part of efforts to maximize their wealth. Therefore, in their quest to achieve this motive, they tend to look for stable and well-organized financial system, where the regulation and supervision activity conforms to the international standards and where the banking institutions are stable or sound enough in order to not represent a source of risk to their investments.

Banks as major player in the financial sector affect foreign investors with their activities since they represent the principal medium for transacting business, especially in the recent times when virtually every business is striving to use more of direct transfer and avoiding cash transactions. Therefore, the stability of banks comes in handy when in discussion of foreign direct investment since it leads to cross border transactions among MNCs. Regarding banks' stability, although several variables are used by different schools of thought, Albulescu, Briciu, and Coroiu (2010), Sghaier and Abida (2013), Oteng-Ababio et al. (2016), among others have used capital adequacy, ROA, and liquidity indicators in their studies to measure banks' stability. Therefore, in line with these studies, the current study employs these variables to investigate the link between banking sector stability and FDI inflows in the context of Ghana.

2.1.2 The Capital Theory

As indicated above, the other theory supporting the study is the capital theory. Although the capital theory was propounded in the pre-classical and classical economic era, its renowned usage came following the work of Carl Menger in 1871 which laid the foundation for what is referred to as a "comprehensive theory of capital" (Trivedi,

2009). Similar to the internalization theory, capital theory acknowledges the profit motive of every entrepreneur. Therefore, in an economy with unstable banking sector, the businesses tend to incur higher cost either directly or indirectly which tend to diminish profit. Therefore, the capital theory is adopted for this study as it is believed that stable banking sector will reduce cost of transacting business which consequently will have positive effect on FDI inflows.

2.2 Overview of Bank

More often than not, the terms bank and financial institution are used interchangeably to refer to the same thing. However, looking at it more closely, a bank is a subset of the broader set referred to as financial institution. Thus, in simple terms, Pan (2015) describe a bank as a category of financial institution that offer banking and other financial services to the public. Indeed, banks mostly provide basic banking services which include accepting deposits and providing loans and advances. Degryse and Ongena (2008) indicate that, prior to the establishment of banks, most of the primary financial activities performed by the banks were done by the money lenders and individuals. However, interest rates were very high with no security regarding public savings and loans procedures. This necessitated the establishment of banks to enhance regulation and make the financial service provision more formalized.

Notwithstanding this rationale for establishment of banks, Mitsakis (2014) posits that the fundamental rationale for the establishment of banks include among others: to provide the security to the savings of customers; to control the supply of money and credit; and to encourage public confidence in the working of the financial system. Further, the fundamental rationale for banks are given as: to increase savings speedily

and efficiently; to avoid focus of financial powers in the hands of a few individuals and institutions; and to set equal norms and conditions to all types of customers (i.e. rate of interest, period of lending, etc.). Essentially, all the banks safeguard the money and valuables and provide loans, credit, and payment services, such as checking accounts, money orders, and cashier's cheques (Goldberg, 2009). It must be emphasized that, a variety of models and integration have emerged in banking services in recent times to which have led to inclusion of other services to banking operations. Nonetheless, the fundamental role of accepting deposits and lending continues to be remain as a distinctive role among banks.

2.3 Overview of Bank Stability

The subject of stability in firms is very critical because one of the primary objectives of every business entity is to seek sustainability into the foreseeable future. With banks particularly, stability is a central issue because of the devastating effect that bank failures have on the general economy of a country. In this regard, the stability of banks is very critical issue of interest to bank regulators across the globe. Irrespective of the criticality of bank stability, there is no general consensus on the definition of the concept of bank stability (Gersl and Hermanek 2010; Creel et al. 2014; Swamy 2014). In some cases, the term is simply referred to as the absence of instability (i.e. a situation in bank performance is impaired and are unable to meet contractual obligations). One school of thought defines it in terms of the bank's "ability to facilitate and enhance financial processes, manage risks, and absorb shocks" (Schinasi, 2004). There are a number of indicators to measure the stability of a bank although there is no standardize measure for it (Segoviano and Goodhart 2009). A review of literature reveals that commonly used bank stability measures are CAMELS and the Z-score. With regards to

this study, the CAMELS model is used with major focus on three factors, namely the capital adequacy, earnings, and liquidity as primary soundness or stability indicators.

2.3.1 Capital Adequacy Indicator

The capital adequacy looks at the capitalization level of the banking system and it is serves as a critical variable for assessing the financial health or otherwise of a bank (Fatima, 2014). The capital adequacy expresses the ability of a bank to keep to a reasonable and appropriate level of capital that can enable the bank to withstand all forms of risk (Swamy, 2014). It also aids management of banks to assess and identify possible threats of risks and deal with them head-on to mitigate the occurrence of the risk and its consequences on the bank. In effect, it depicts the how well positioned the bank is able to keep adequate capital to absorb potential operational risks the bank may be exposed to. Beside the banks as financial institution, the capital adequacy also provides the platform for depositor to form their risk perception on a bank.

Thus, in effect, the capital adequacy serves as a useful tool to protect the confidence of owners or shareholders, thus, giving them assurance of preventing the entity form bankruptcy (Swamy, 2014). This means that capital adequacy is regarded as a cushion that provide comfort and assurance to depositors of some form of stability of banks. As a measure of capital adequacy, the capital adequacy ratio is mostly used. This ratio is a measure that protect banks from over-leveraging and send signals to banks on the possibility of insolvency which creates a distress situation. This is computed as the ratio of the bank capital to the current liabilities of the bank. For the purpose of this study, the BOG's capital adequacy ratio of adjusted capital base shall be used as the proxy for capital adequacy ratio.

2.3.2 Earnings Quality Indicator

The earnings capacity of a banks is very critical in ensuring the sustainability and stability of banks (Dal Maso et al., 2018). Indeed, the quality of a bank's earnings expresses the bank's capacity or otherwise to generate revenues at steady level to protect the bank from going into liquidation (Jin, Kanagaretnam, and Liu, 2018). This ultimately depicts how competent a bank and its management are in protecting the bank from imminent collapse based on the bank's level of profitability. Thus, essentially, the earnings capacity of the banking sector significantly affects the stability of the sector. Although there are several methods to assess the earning quality and capacity of the banking sector, the return on asset is adopted in this study since it helps to ascertain well or otherwise the assets of the banks have been utilized over a period of time. Primarily, a higher level of the ROA reflects a more profitable and sound banking system and vice versa (Dal Maso et al, 2018).

2.3.3 Liquidity Indicator

Valla, Saes-Escorbiac, and Tiesset (2006) avert that liquidity management indicator in banks is a very crucial soundness indicator. Given that banks depend largely on customers deposits to earn their interest income, it is always appropriate to maintain a high level of cordial relationship with customers of the bank. In doing this, it behooves every bank to ensure adequate level of liquidity so that depositors demand for withdrawals can be met promptly to give them assurance of safety of their deposits. This means that banks' must invest a reasonable amount of their assets in liquid assets to be able to enable easy conversion to meet depositors demand since failure to meet such demands crates the floodgates for panic withdrawals and its devastating consequence on banks. Indeed, the liquidity indicator provides a much more overview

of how well bans are positioned to withstand shocks in the market. Basically, a better liquidity position gives an indication of the banking robust banking sector to respond to the demands of financial commitments (Rupeika-Apoga et al., 2018). For the purpose of this work, the ratio of core liquid assets to total asset is used as a proxy for liquidity.

2.4 Overview of FDI

An FDI requires the creation or acquisition of assets by foreign investors in a non-resident country (Kwoba and Kibati, 2016). Technically, an FDI does not just require the creation and acquisition of economic ventures but the ownership of significant part of the shareholdings of the entity which provide the foreign investor a significant control or influence. According to the working definition by the IMF and OECD (1996), FDI encompass the investment of resources into by foreign investors in a non-resident economy, whereby a long-term interest and relationship of ownership and control or significant influence is established in the host country. According the OECD, the term "lasting interest" as used in the definition implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter.

Per the International Monetary Fund (IMF) and OECD benchmark, the presence of the lasting interest is seen in the ownership of at a minimum of ten percent ownership rights that entitles the foreign owner to voting right in top level decisions of the organization. It must be emphasized that, the purpose of FDI differs from that of foreign portfolio investment where there is no creation of economic entity or the acquisition of economic entity which gives the investor a greater degree of control in the entity or some level of significant influence. This means that different from FDI, portfolio investment gives

the investor only the right to share in the profit of the investee portfolio. Thus, in effect, FDI is described as a form of investment where a firm, residing in one country holds ownership stake in a firm in another country through acquisition, merger, licensing or building of new facility. In other words, FDI implies the investment of economic resources in a non-resident country by non-resident investors whereby the non-resident investors possess significant control of the established or the acquired investee entity. Firms that undertake FDIs are known as Multinational Corporations (MNCs) or Multinational Enterprises (MNEs). Firms usually invest abroad when they possess some assets that compliments host-countries' attributes and results in significant profits which hitherto would not have been accumulated if the firm had operated domestically (Li and Vashchilko, 2010). FDI is an example of international factor movements and thus, serve as a channel through which various factors of production flow from countries of origin to host countries.

In the context of this study, FDI is described in line with the OECD definition and description of FDI, and it is distinguished from Foreign Portfolio Investment (FPI). This is because the latter involves a passive investment in stocks and other financial assets which are usually short term, and mostly investors do not generally influence the management of the enterprise whereas FDI is a long term investment in physical assets like buildings and machineries, with the main aim of undertaking business that gives a better opportunity for economic development (Al Khouri and Khalik, 2013).

2.4.1 Categories of FDI

Zhuang and Griffith (2013) indicates that FDI can broadly be categorized into mergers and acquisitions and greenfield investments. According to UNCTAD (2010), majority

of FDIs in less developed countries are made up of greenfield investments. Greenfield investment involves direct establishment of new facilities or expanding existing ones (Zhuang and Griffith, 2013). It is noted as a principal channel through which many multinationals invest in developing countries. It is more preferred, if not the most desired by host countries because they have the tendency of creating new jobs, providing technological know-how and serving as linkages to the global marketplace.

Mergers and acquisitions on the other hand involve the transfer of existing assets from local firms to foreign firms. They are seen as major modes of investing in developed countries. Cross-border mergers constitute the coming together of two or more firms in different countries to operate a business with a common goal whereas a cross-border acquisition occurs when the control of assets and operations of the local firm is transferred to a foreign affiliate. According to a survey by the Investment Promotion Agency (IPA) of the UNCTAD, firms in developed countries prefer undertaking greenfield investment to mergers and acquisitions in the African continent (UNCTAD, 2015).

2.4.2 Forms of FDI

FDI can be in the form of inflows referred to as Inward Direct investment which constitute the value of investment made by non-resident investors in the reporting economy whereas outflows which is known as the outward direct investment, involving the transfer of assets and liabilities by resident investors to other countries. Some likely questions that some managers of MNCs might ask before establishing their companies abroad are; where exactly to locate their businesses and how to control them. Little attention has been given to locational decisions in literature (Buckley, Devinney, and Louviere, 2007). Locational decisions can be affected in two ways: some firms would

want to invest at places where they are familiar with, while others would prefer less of destinations that are closer, familiar or have similar markets. Foreign investors deliberately choose to invest outside their home countries for several purposes. They include but not limited to: acquiring natural resources, cheap labour, and gaining access to new markets that cannot be gotten domestically.

Again, some schools of thought argue that FDI comes in different forms, with the objectives of the FDI flow being the central basis of distinction. In their view, they identify four types of FDI flows which include: resource seeking or supply oriented FDI, which looks out for the extraction of natural resources like minerals, oil and even unskilled labour; market seeking or demand oriented, which focuses on meeting the needs of a specific foreign market; strategic asset seeking oriented FDI, which tends to augment the ownership advantages while minimizing those of competing firms; and finally, efficiency or rationalized seeking FDI, which is designed to promote a more effective specialization of resources available in host and domestic countries (Dunning, 2000; Alcantara and Mitsuhashi, 2012).

According to Dunning (2000), the resource and market seeking FDIs are mostly associated with first-time investments especially in developing economies. He further advanced that strategic asset seeking is dependent on the intellectual endowment in host countries which when tapped into, will be of immense benefit to foreign firms. Again, he states that efficiency seeking FDI will be worthwhile if the foreign firm is already producing in at least one country. In similar but different view, Slangen and Beugelsdijk (2010) group FDI into horizontal and vertical forms. Per their position and description, horizontal FDI is referred to as market-seeking activity whereas vertical FDI is related

to the extraction of natural resources or further production of intermediate goods by interlinked affiliates. Therefore, a vertical economic activity can be in the form natural or efficiency focused FDI activity. Again, Musila and Sigué, (2006) indicates that there is another form of FDI, similar to the vertical types of FDI which involves the extraction of natural resources in the host country. However, the authors contend that this type of FDI usually triggers conflict in the host country. Therefore, a significant number of developing countries favours the export-oriented form of FDI which is seen to have a lower probability of triggering conflicts.

2.4.3 Determinants of FDI

Several schools of thought have given different factors to influence the inflow of FDI into countries. In the view of some schools of thought, FDI flows to economies where there are mostly locations or geographic advantages (Pantelidis and Nikolopoulos, 2008; and Kinda, 2010). In their view, the locations advantage has to do with the availability of multiple factors which together enhance the smoothness of doing business, overall profitability, survival, and growth. The location advantage factors are among others, cheap labour, natural resources, no or less trade barriers, availability of natural resource endowments, the cost of transportation, the policies and regulations of government, the stability of the macro-economy, sociocultural and political factors. These factors in effect in effect represent the pull factors to attracting FDI inflows (Bokpin et al., 2015).

Other school of thought categorized the point out that the major determinants of FDI inflows to an economy rest on four key intentions: the quest for resources (i.e. access to labor, natural resources and infrastructural availability), quest for market (i.e. a

means of strategically expanding the market size of a firm), quest for efficiency (i.e. to have access to cheap labour to reduce the overall cost of production), quest to possess assets (i.e. to discover new innovations and developments) Dunning in 1993: cited in Cleeve, 2008).

Several other scholars have given the various strands of determinants to affect the inflow of FDI into a country, either developed, developing. Many of these scholars recognize the relationship between FDI inflow and economic growth and emphasize on the quality of domestic institution and enforceability of law (Thiam, 2006; Alam et al., 2013; Majumder and Nag, 2015). Accoding to Neumayer and Spess (2005), bilateral investment treaties (BITs) serve as major determinants of FDI flows to developing countries. Thus, in the view of Elkines et al. (2006), BITs tend to attract more FDI as they became the most important international legal mechanism for encouragement and direction of FDI. Although arguably, it must be emphasized that developing and transitioning countries are now seeing in recent times have seen a surge in FDI inflow as a result of enhancement of basic infrastructure and strengthening of institutions, coupled with improvement the skills of the human resources.

Azam and Lukman (2010) indicates that economic variables such as GDP growth rate or real GDP real GDP and a significant number of macroeconomic indicators influence the flow of FDI into a country. In their view, the factors that influence FDI inflows vary from country to country as evidenced by outcome of several studies by different schools of thought and a significant number of finance literature. For instance, some authors have studied on determinants of FDI inflow in specific countries which include Singhania and Gupta (2011) in India; Miskinis and Juozenaite (2015) in Greece,

Ireland, and the Netherlands; Rangkakulnuwat and Paweenawat, 2015 in ASEAN countries.

Other schools of thought have also argued on the crucial role of the government together with the existence of well-functioning institutions in drawing investors to undertake FDI. One school of thought employed quite a number of factors to study how FDI flows into a country (Globerman and Shapiro, 2003). Similarly, another school of thought have also used investigated and concluded that different economic and non-economic factors affect the flow of FDI into a county (Brewer, 1993). The outcomes of the various studies suggest that FDI do not just out of the blue but is influenced by improvement in significant number of both macroeconomic and non-economic variables since foreign investors do invest with a profit motive. Thus, in effect, the flow of FDI into a particular economy depends on the how different range of factors, which vary across countries.

2.5 Empirical Review

This section of the study review literature on the findings of studies closely related to the banking sector stability and foreign direct investment.

2.5.1 Bank Performance (ROA) and FDI

Studies by different authors on the relationship between bank performance measured by ROA and FDI have produced mixed outcomes. In a study pursued by Sghaier and Abida (2013) which explored FDI and financial system development in the North African Countries, the authors concluded that FDI inflows have direct impact on the banking sector of the local economy by enhancing their efficiency and performance. In consistent with the above position, Markusen and Venables (1999) also found a

corroborative evidence which they concluded that FDI inflows brings new customers to banks which have a positive impact on the performance of the sector in the receiving country. Musah et al. (2018) also find supportive evidence in their study when the established that there is a significant positive relationship between FDI inflows and profitability of banks.

Notwithstanding the outcomes above, it emerged from the outcome of a study by Bhatnagar et al. (2013) that there is no significant relationship between FDI inflows and profitability. However, the unlike the other studies above which focused on the financial sector, the study by Bhatnagar et al. (2013) was related to the telecommunication industry. Again, another study which found contrary evidence is the study by Oteng-Ababio et al. (2016) which examined the impact of FDI on profitability of selected banks in Ghana. The authors concluded that there is a negative relationship between FDI and bank profitability measured by return on assets.

In another study by Tajgardoo, Noormohamadi and Behname (2012) which tried to investigate the effect of banks stability on FDI inflows relying on ROA which is a performance indicator as proxy for stability, it emerged that there is a positive relationship between ROA and FDI inflows. The authors thus, concluded that bank stability helps in attracting foreign direct investment into the local economy. In agreement with the outcome of the study by Tajgardoo, Noormohamadi, and Behname (2012), a study conducted by Albulescu, Briciu, and Coroiu (2010) which examined the role of financial stability in determining FDI inflows in Central and Eastearn European Countries (CEECs) found that financial system stability represents an attractive factor for the foreign investors and can be considered as an FDI determinant. The authors

found among other things that there is a positive relationship between financial sector profitability performance and FDI inflows. Thus, their conclusions that financial system stability fuels the attraction of FDI inflows.

2.5.2 Bank Capital Adequacy, Liquidity, and FDI

In the study conducted by Adeniyi et al. (2012) which explored FDI and Financial Sector Development, the study established that FDI has a positive impact on the capital base of banks. The results suggest that FDI inflows improve the business climate in the country which leads to more credit creation and eventually higher profit.

In studying the link between bank stability and FDI inflows, Albulescu, Briciu, and Coroiu (2010) also used capital adequacy as proxy for financial stability to study the role of financial stability in determining FDI inflows in Central and Eastearn European Countries (CEECs). The authors concluded financial system stability serve as a pull factor in attracting FDI inflows in an economy based on the outcome that the capital adequacy has a significant positive relationship with FDI inflows.

A study done by Oke (2012) which sought to examine the relationship between financial sector growth and foreign direct investment in Nigeria found evidence to support the finding of the study by Albulescu, Briciu, and Coroiu (2010). Oke (2012) found in his study that there is a positive relationship between financial sector growth (proxied by capital adequacy) and FDI inflows into the Nigerian economy. These findings above suggest that financial instability within the financial sector discourages FDI as it causes important economic costs for investors. This means that in deploying resources into an economy by foreign investors, one key thing they tend to look for is

a stable and well organized financial system, where the regulation and supervision activity conforms to the international standards and where the banking institutions are sound enough in order to not represent a source of risk to their investments.

In contrast with the findings from the studies mentioned above, a study by Tsaurai (2014) which investigated if there is a causality relationship between banking sector development, in other words banking sector soundness or stability and FDI inflows in Botswana, using the capital adequacy indicators of the banking sector. The results from the study shows that there is no direct causality relationship between capital adequacy (as proxy for banking sector development) and FDI net inflows. This finding suggests that the relationship between banking sector development and FDI net inflows is a weak one and the two set of variables affect each other indirectly through other factors in the context of Botswana.

Regarding the bank liquidity and FDI link, the study conducted by Adeniyi et al. (2012) which explored FDI and Financial Sector Development also established that financial development measured by the liquidity indicator established that FDI has a positive impact liquidity of banks. In contrast with the above finding, Kim (2013) in a study which examined the relationship between FDI and banking crisis (proxied by liquidity indicators) found no significant association between liquidity and FDI.

2.5.3 Conclusion on the Reviews

Positive Relationships

- Sghaier and Abida (2013) found a positive relationship between FDI inflows and financial stability through stronger system development.

- Markusen and Venables (1999) also found evidence of direct relationship between banks stability and FDI inflows.
- Musah et al. (2018) also find supportive evidence in their study which established a significant positive relationship between FDI inflows and bank profitability which translates into the stability of banks.
- Tajgardoo, Noormohamadi and Behname (2012) also reported a positive relationship between banks stability and FDI inflow.
- Albulescu, Briciu, and Coroiu (2010) explored the link between financial system stability and FDI inflows and found a direct link between the two variables.

Negative or No Relationships

- Bhatnagar et al. (2013) found in their study that there is no significant relationship between FDI inflows and profitability which is a key determining factor in determining the stability of banks.
- Oteng-Ababio et al. (2016) which examined the impact of FDI on profitability of selected banks in Ghana. The authors concluded that there is a negative relationship between FDI and bank profitability measured by return on assets.

2.6 Conceptual Framework

The conceptual model to provide a roadmap to the study based on the review of literature above is presented in Figure 2.1 below. From the figure, the dependent variable is FDI inflows while the independent variables are the capital adequacy ratio, earning quality, and liquidity. The capital adequacy ratio determines the banks

capitalization level and indicates the capacity of banks to maintain capital commensurate with the nature and extent of all manner of risks and it is a good indicator of stability in banks. The earnings quality which is measure by the ROA helps to ascertain the earnings potential of the banks. The higher the level of ROA, the better and more stable the banking system is seen to be and vice versa. The liquidity variable helps to determine the bans capacity to pay its creditors which is a crucial measure to determine stability. Thus, in effect, the relationship depicted in the framework below shows that the financial stability variables affect FDI inflows into the country.

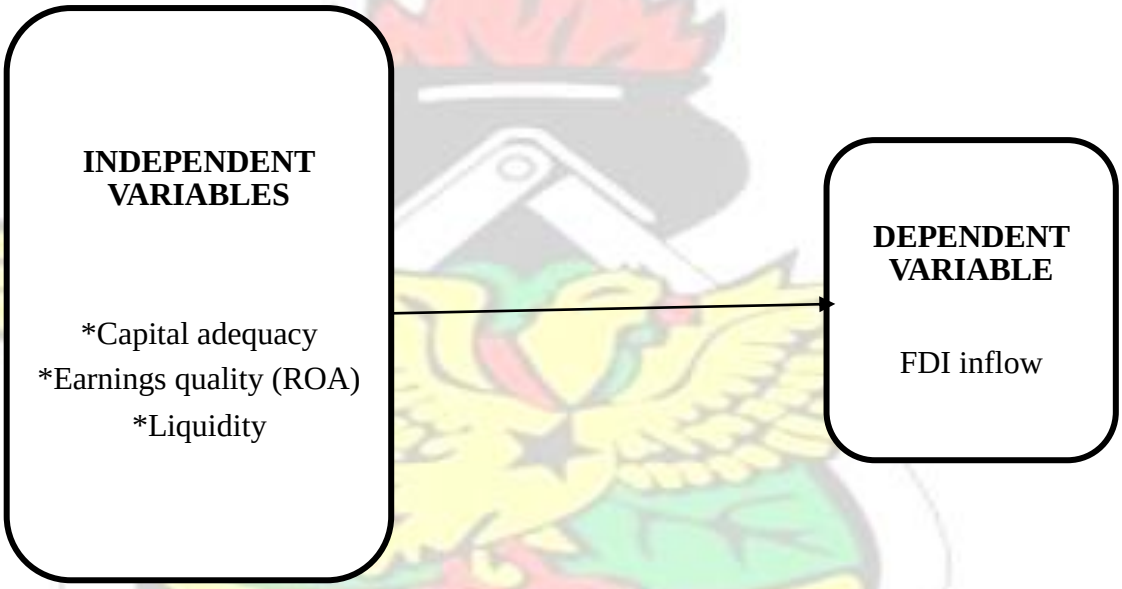

Figure 2.1: Conceptual model

Source: Created by Author (2020)

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The chapter discusses the method used in achieving the objectives of the study. It first looks at the research design and source of data. The chapter further looks at the data analysis procedures where the econometric model for the study is presented, as well as the ethical issues worth considering in undertaking the study.

3.1 Research Design

Research design is employed by researchers to link together the various aspects of a study so as to achieve the objective of the study (Trocim, 2002). The researcher used the quantitative research approach while adopting the explanatory research purpose. The quantitative research approach and explanatory purpose are employed because the study uses quantitative data to explain the relationship between the study variables. With regards to the research strategy, the research employs the desk research strategy to carry out the study since all relevant data were obtainable from the online database of the relevant institutions. Further, the researcher adopted the longitudinal study design for the study since the study uses times series data spanning a ten-year period from 2009 to 2018.

3.2 Population of the Study

The population here can be described as the complete set of settings the researchers want to make a broad view of. In this study, the secondary data from various developmental and financial annual reports will be reviewed for comprehensiveness

and constituency before statistical analysis. Specifically, the population of the study is the time series data of all the 24 registered commercial banks in Ghana.

3.3 Sample and Sampling Techniques

Sample is a group from a population that is a representative of a population. Sampling on the other hand refers to the technique used in the selection of a proportionate representation from a total sample size (Trocim, 2002). The purposive sampling technique is used since the researcher already knows the sources of data for the analysis. The available dataset of all commercial banks as well as a ten-year time series data on FDI indicators are used to achieve the study's objectives.

3.4 Source and Type of Data

The study used time series data spanning a ten-year period from 2009-2018. Data was obtained from secondary sources only. Data on the dependent variable which is FDI and the control variables employed in the study to mitigate their potential effect on the outcome of the relationship between FDI and bank stability, which are GDP growth rate and Inflation was collected from the World Bank's World Development Indicators Database. Data on the independent variables which include Capital Adequacy, Return of Asset, and Liquidity was collected from the Bank of Ghana Times Series Database. After gathering the data, multicollinearity test was be done to ascertain the reliability or otherwise of the data before proceeding to the analysis.

3.5 Data Analysis

The purpose of the study is to establish the relationship between the dependent and independent variables which are banking sector stability and FDI inflows. In this

regard, the multiple regression technique, specifically, the panel regression analysis was used to analyze the data. The STATA statistical analysis software was used to perform the analysis.

3.6 The Econometric Model Specification

The regression models for the study will be formulated as follows:

$$FDI_t = a + X_1CA_t + X_2GDP_t + X_3INF_t + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$FDI_t = a + X_1ROA_t + X_2GDP_t + X_3INF_t + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

$$FDI_t = a + X_1LIQ_t + X_2GDP_t + X_3INF_t + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Where;

a = the intercept

$X_1 – X_3$ = the regression coefficients

FDI_t = Foreign direct investment inflows at time $_t$

CA_t = Capital Adequacy for the banking sector at time $_t$

ROA_t = Return on Asset for the banking sector at time $_t$

LIQ_t = Liquidity of the banking sector at time $_t$

GDP_t = GDP growth rate at time $_t$

INF_t = Consumer price inflation rate at time $_t$

ε = the error term

3.7 Model Description and Measurement

The dependent and independent variables used in the study were operationalized as indicated in Table 3.1

3.7.1 Dependent Variable

FDI Inflows

The FDI inflows refer to the total FDI inflow into the country in a particular year irrespective of the sector into which the FDI went to. For the purpose of this work, FDI inflows into the country as reported by the World Bank Development Indicators Database were used.

3.7.2 Independent Variables

Capital Adequacy

The capital adequacy looks at the capitalization level of the banking system. This indicator is a critical variable for assessing the financial health or otherwise of a bank. The capital adequacy expresses the ability of a bank to keep to a reasonable and appropriate level of capital that can enable the bank to withstand all forms of risk. It also aids management of banks to assess and identify possible threats of risks and deal with them head-on to mitigate the occurrence of the risk and its consequences on the bank. In effect, it depicts the how well positioned the bank is able to keep adequate capital to absorb potential operational risks the bank may be exposed to.

Beside the banks as financial institution, the capital adequacy also provides the platform for depositor to form their risk perception on a bank. Thus, in effect, the capital adequacy serves as a useful tool to protect the confidence of owners or shareholders, thus, giving them assurance of preventing the entity form bankruptcy. This means that capital adequacy is regarded as a cushion that provide comfort and assurance to depositors of some form of stability of banks. As a measure of capital adequacy, the capital adequacy ratio is mostly used. This ratio is a measure that protect banks from

over-leveraging and send signals to banks on the possibility of insolvency which creates a distress situation. This is computed as the ratio of the bank capital to the current liabilities of the bank. For the purpose of this study, the BOG's capital adequacy ratio of adjusted capital base is used as the proxy for capital adequacy ratio. This is used since it the banking industry average capital adequacy indicator reported by the Bank of Ghana. Therefore, it is much more reliable to use.

Earnings Quality (ROA)

The earnings capacity of a banks is very critical in ensuring the sustainability and stability of banks. Indeed, the quality of a bank's earnings expresses the bank's capacity or otherwise to generate revenues at steady level to protect the bank from going into liquidation. This ultimately depicts how competent a bank and its management are in protecting the bank from imminent collapse based on the bank's level of profitability. Thus, essentially, the earnings capacity of the banking sector significantly affects the stability of the sector. Although there are several methods to assess the earning quality and capacity of the banking sector, the return on asset is adopted in this study since it helps to ascertain well or otherwise the assets of the banks have been utilized over a period of time. Primarily, a higher level of the ROA reflects a more profitable and sound banking system and vice versa. For the purpose of this study, the industry average ROA reported by the Bank of Ghana (which is the after-tax profit to total asset of banks) is used. This industry reported by the BOG is deemed appropriate since it is the reported banking sector average reported by the central bank and is more reliable to use.

Table 3.1: Measurement of variables

Variable	Operational Measurement	Code	Source Of Data
Dependent Variable			
FDI inflows	Natural log of total FDI inflows	FDI	World Bank World Development Indicators
Independent variables			
Capital Adequacy	BOG capital adequacy ratio of adjusted capital base	CA	Bank of Ghana
Earnings quality	The ratio of after-tax profit to total assets of the banking sector (return on asset)	ROA	Bank of Ghana
Liquidity	The ratio of Core liquid assets/reserves to total assets of the banking sector.	LIQ	Bank of Ghana
Control Variables			
GDP rate	Annual GDP growth rate	GDP	World Bank World Development Indicators
Inflation	Annual consumer price inflation rate	INF	World Bank World Development Indicators

Liquidity

Liquidity management indicator in banks is a very crucial soundness indicator. Given that banks depend largely on customers deposits to earn their interest income, it is always appropriate to maintain a high level of cordial relationship with customers of the bank. In doing this, it behooves every bank to ensure adequate level of liquidity so that depositors demand for withdrawals can be met promptly to give them assurance of safety of their deposits. This means that banks' must invest a reasonable amount of their assets in liquid assets to be able to enable easy conversion to meet depositors demand since failure to meet such demands crates the floodgates for panic withdrawals and its

devastating consequence on banks. Indeed, the liquidity indicator provides a much more overview of how well bans are positioned to withstand shocks in the market. Basically, a better liquidity position gives an indication of the banking robust banking sector to respond to the demands of financial commitments. For the purpose of this work, the ratio of core liquid assets to total asset of the banking sector as reported by the Bank of Ghana is used as a proxy for liquidity. This liquidity indicator reported by the central bank is deemed appropriate as proxy for liquidity since it is the reported banking industry average reported by the central bank.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter contains the data analysis and discussions. It is basically made up of the summary statistics of the data, correlation analysis of the variables, results of the empirical investigation, and also, a discussion of the findings.

4.1 Summary Statistics

The descriptive statistics present the overall data set used in the study in a summarized and meaningful manner for analysis. The underlying measures of description with respect to this study were the mean, the standard deviation, the maximum values and the minimum values.

Table 4.1 shows the summary of the data regarding FDI inflows (FDI) which represent the dependent variable and the independent variables used as proxies for measuring bank stability which include Capital Adequacy (CA), Earnings Quality (ROA), and Liquidity (LIQ). From the table, FDI inflows for the ten-year period averaged $21.85 million while CA, ROA, and LIQ of the banking sector for the period averaged 18.39%, 4.36%, and 25.75% respectively. The mean CA value of 18.39% shows that the capital capacity of the banks constituted 18.39% of liabilities and risk weighted assets of the banks. This gives an indication that the capital base of the banks is fairly inadequate to cover the liabilities and risk weighted assets of the banks. Further, the mean value of 4.36% for ROA shows that the banks are able to use their assets to generate profit which is worth 4.36% of the total assets of the banks while the mean LIQ value of 25.75%

provide an indication that on average the bank's core liquid assets is 25.75% of the total assets of the banks. This suggests that the total assets of the banks can cover their core liquid assets 3.88 times, which gives a positive picture of the stability of the banks. It is also evident from the table that with the exception of ROA, the variation among the variables in the respective year is moderate as seen from the minimum and maximum values as shown in the Table 4.1 below.

Table 4.1: Summary Statistics

	FDI	CA	ROA	LIQ	GDP	INF
Mean	21.85	18.39	4.36	25.75	6.63	12.98
Median	21.90	18.35	3.83	26.15	6.79	12.02
Standard Deviation	0.13	0.62	1.23	1.73	3.55	4.12
Minimum	21.59	17.41	2.83	21.71	2.18	7.13
Maximum	21.97	19.27	6.62	27.83	14.05	19.25
Count	10.00	10.00	10.00	10.00	10.00	10.00

Source: Field data (2020)

4.2 Correlation Analysis

Correlation analysis seeks to establish the strength of the relationship between pairs of study variables. Although correlation seeks to establish the relationship between variables, it does not imply causation. It is important to note that a correlation of one (1) indicates a perfect positive correlation where the variables move in the same direction and vice versa. In Table 4.2 below, the correlation matrix shows the outcome of the relationship between Bank Stability in Ghana, measured by CA, ROA, and LIQ and FDI inflow represented by FDI. From the table, most of the variables show weak

correlation while others present no correlation. Nonetheless, FDI and CA and GDP and INF show strong negative and positive correlations at [r = -0.544, p<0.05] and [r = 0.68, p<0.05] respectively. With regards to the independent variables, all of them show a weak negative correlation with CA and ROA having [r = -0.176, p<0.05], CA and LIQ having [r = -0.438, p<0.05], and ROA and LIQ having [r = -442, p<0.05]. The weak correlation between the independent variables makes them appropriate for use in the study since it provides a low probability of each of them having effect on the outcome of each of the regression results.

Table 4.2: Correlation Matrix

	FDI	CA	ROA	LIQ	GDP	INF
FDI	1					
CA	-0.544	1				
ROA	0.450	-0.176	1			
LIQ	-0.075	-0.438	-0.442	1		
GDP	0.008	-0.243	-0.234	0.477	1	
INF	0.087	-0.459	-0.084	0.315	0.681	1

*Significance level: *p < 0.10, **p < 0.05, ***P < 0.01*
Source: Author (2020)

4.3 Regression Results

4.3.1 Empirical Model One: CA and FDI

Table 4.3 below shows the result of the regression model one in the preceding chapter. From the table, it is observed that the coefficient of CA is -0.130. The coefficient of -0.130 for CA shows that, a unit change in CA will lead to -0.130 change in FDI. This

suggests that there is an inverse relationship between CA and FDI and that with a one percent increase in CA, FDI drops by 13 percent and vice versa.

Table 4.3: Result of Empirical Model One: CA and FDI

	Coefficients	Standard Error	t Stat	P-value
Intercept	24.317	1.499	16.223	0.000
CA	-0.130	0.077	-1.681	0.044
GDP	0.000	0.016	-0.029	0.978
INF	-0.006	0.015	-0.391	0.709
R Squared	0.329			
Adjusted R-Squared	0.310			
Sign. F-value	0.012			
Obs	10			

From Table 4.3, the R square value is 0.329. The R square value of 0.329 (32.9 or approx. 33 percent) shows that 33 percent of the change in FDI is explained by changes in the independent variable, which is CA. This means that the remaining 67 percent of the variation in FDI is as a result of other variables which are not incorporated in the regression model. Further, result in Table 4.3 shows a Significant F-value (probability of F test) of 0.012 which is below the level of significance of 0.05 defined for the test. This F-value of 0.012 shows that all the parameters defined in the model are statistically significant.

4.3.2 Empirical Model Two: ROA and FDI

Table 4.4 below also shows the result of the second model in the preceding chapter. From the table, it is observed that the coefficient of ROA is 0.048. The coefficient of

0.048 for ROA shows that a unit change in ROA will lead to 0.048 changes in FDI. This suggests that there is a positive relationship between ROA as a measure of Banks Stability and FDI, although the relationship is not a strong one. Thus, in effect, a one percent increase in ROA of the banking sector would result in a 4.8 percent increase in FDI inflows and vice versa

.

The result in Table 4.4 further show an R square value is 0.220. The R square value of 0.220 (i.e. 22 percent) shows that only 22 percent of the changes in FDI inflow is explainable by variations in the independent variable (ROA) in the model. This means that the rest of 78 percent of the variation in FDI is as a result of other variables which are not included in the regression model. It is also important to note that result in Table 4.4 shows a Significant F-value (probability of F test) of 0.017 which is less than level of significance of 0.05 defined for the test. The F test value of 0.017 gives an indication that all the parameters defined in the model are statistically significant.

Table 4.4: Result of Empirical Model Two: ROA and FDI

	Coefficients	Standard Error	t Stat	P-value
Intercept	21.587	0.232	93.151	0.000
ROA	0.048	0.038	1.263	0.035
GDP	0.002	0.018	0.117	0.910
INF	0.003	0.015	0.174	0.867
R Squared	0.220			
Adjusted R-Squared	0.170			
Sign. F-value	0.017			
Obs	10			

4.4.3 Result of Empirical Model Three: LIQ and FDI

Table 4.5 below also shows the result of the third regression model defined in chapter three. From the table, it is observed that the coefficient of LIQ is -0.007. The coefficient of -0.007 for LIQ shows that a unit change in LIQ will lead to -0.007 changes in FDI. This suggests that there is negative relationship between LIQ as a measure of Banks Stability and FDI. However, the relationship is an extremely weak relationship. This means that one percent increase in LIQ of the banking sector leads to an insignificant percentage decrease in FDI inflows of 0.7 percent and vice versa.

Again, the result in Table 4.5 shows that R square value obtained is 0.20. This means that only 20 percent of the changes in FDI inflow is explainable by changes in the liquidity of banks (LIQ) in the model. This suggests that 80 percent of the changes in FDI inflows are as a result of other factors which are not inclusive in the model. Again, Table 4.5 shows a Significant F-value (probability of F test) of 0.003. The F-value of 0.003 shows that all the parameter considered in the model are statistically significant.

Table 4.5: Result of Empirical Model Three: LIQ and FDI

	Coefficients	Standard Error	t Stat	P-value
Intercept	21.986	0.835	26.329	0.000
LIQ	-0.007	0.034	-0.218	0.835
GDP	-0.002	0.021	-0.079	0.940
INF	0.005	0.017	0.274	0.794
R Squared	0.201			
Adjusted R-Squared	0.189			
Sign. F-value	0.003			
Obs	10			

4.5 Discussion of Findings

From the outcome of the regression estimation in Table 4.3 above, it is observed that the coefficient of CA is -0.130. The coefficient of -0.130 for CA shows that, a unit change in CA will lead to -0.130 changes in FDI. This suggests that there is an inverse relationship between CA and FDI and that with a one percent increase in CA, FDI drops by 13 percent and vice versa. This shows that there is a weak negative relationship between CA and FDI inflows. The result above is inconsistent with the outcome of a study conducted by Albulescu, Briciu, and Coroiu (2010) which found capital adequacy to have a significant positive effect on FDI inflows and concluded financial stability serves as a pull factor in attracting FDI inflows.

Further to the above, outcome of the current study disputes the findings of the study pursued by Oke (2012) which found that there is a positive relationship between financial sector growth proxied by capital adequacy and FDI inflows and thus, concluded that financial instability within the financial sector discourages FDI inflows. The result of the current study further disagrees with the findings from a study done by Tsaurai (2014) which also found no direct causality relationship between banking sector soundness proxied by capital adequacy and FDI inflows. The disagreement among the outcome of the various studies in the discussion above could be attributable to the differences in the economic context within which these studies were conducted. For instance, while the study by Albulescu, Briciu, and Coroiu (2010) was done within Central and Eastearn European Countries (CEECs), that of Tsaurai (2014) and Oke (2012) were done in Botswana and Nigeria respectively which are different economic environment from that of Ghana.

Again, from Table 4.4 above, it is observed that the coefficient of ROA is 0.048. The coefficient of 0.048 for ROA shows that a unit change in ROA will lead to 0.048 changes in FDI. This suggests that there is a positive relationship between Banks Stability (measured by ROA) and FDI inflows even though the relationship is a weak one. This means that one percent increase in ROA of the banking sector would result in a 4.8 percent increase in FDI inflows and vice versa. The outcome of the current study in respect of ROA and FDI inflows concurs with a study by Tajgardoo, Noormohamadi and Behname (2012) which tried to investigate the effect of banks stability on FDI inflows relying on ROA which is a performance indicator as proxy for stability which emerged that there is a positive relationship between ROA and FDI inflows.

However, unlike the outcome of the current study where the relationship is weak, the study by Tajgardoo, Noormohamadi and Behname (2012) found a strong relationship between the two variables. Similarly, the current study also supports the outcome of the work of Musah et al. (2018) which found evidence that there is a strong positive banking relationship between banking sector performance and FDI inflows. Unlike the outcome of the current study, a study pursued by Oteng-Ababio et al. (2016) which examined the impact of negative relationship between FDI on profitability of banks measure by ROA. Notwithstanding the outcome of the studies considered, the finding of the current study in respect of the ROA and FDI also deviates from the outcome of another study done by Bhatnagar et al. (2013) which revealed that there is no significant relationship between FDI inflows and profitability proxied by ROA.

Also, from the Table 4.5 above, the coefficient of LIQ is -0.007. This means that there is an extremely weak negative relationship between LIQ as a measure of Banks Stability and FDI inflows. This result is in contrast with the outcome of a study by Adeniyi et al. (2012) which established that financial sector liquidity is positively related to FDI inflows. Unlike the outcome of the current study and that of the work of Adeniyi et al (2013), the finding of a study pursued by Kim (2013) found no significant association between liquidity and FDI inflows.

CHAPTER FIVE

SUMMARY OF FINDINGS AND CONCLUSIONS

5.0 Introduction

This chapter is the last chapter of the study and it presents the summary of findings and conclusions. Basically, the chapter contains the summary of the research findings obtained in chapter four and draws conclusions on them. The chapter also presents recommendations for the policy and future research.

5.1 Summary of Findings

The overall aim of the study is to examine the effect of banking sector stability on FDI inflows in Ghana. Following from this general objective, three specific objectives were defined. These specific objectives were: to examine the relationship between banking sector capital adequacy and FDI inflows in Ghana; to examine the relationship between banking sector return on asset and FDI inflows in Ghana, to examine the relationship between banking sector liquidity and FDI inflows in Ghana.

5.1.1 Banking Sector Capital Adequacy and FDI

With respect to the first objective which sought to examine the relationship between capital adequacy of the banking sector and FDI inflows in Ghana, the study found that a one percent increase in capital adequacy results in 13 percent decrease in FDI inflows. This means that there is a statistically weak negative relationship between banking sector stability measured by capital adequacy and FDI inflows into the country.

5.1.2 Banking Sector Return on Asset and FDI

On the second objective of the study which sought to examine the relationship between banking sector stability measured by the ROA of the banking sector and FDI inflows into Ghana, it emerged that one percent increase in ROA of the banking sector results in 4.8 percent increase in FDI inflows and vice versa. This suggests that there is a statistically weak positive relationship between bank stability of the banking sector measure by ROA of the banking sector and FDI inflows.

5.1.3 Banking Sector Liquidity and FDI

With regards to the last objective which sought to examine the relationship between banking sector stability proxied by liquidity of the banking sector and FDI inflows, the study revealed that a one percent increase in liquidity of the banking sector results in 0.7 percent decrease in FDI inflows. This suggests that there is a statistically insignificant negative relationship between banking sector liquidity and FDI inflow into the country.

5.2 Conclusions

FDI inflows into developing countries serve as invaluable tool in catapulting developing countries into economic growth. Indeed, FDI inflows into Ghana are particularly important to supporting the government industrialization agenda of One District One Factory (1D1F) since it will facilitate the transfer of knowledge, skill and technology in the Ghana. Nonetheless, it is important to note that attracting FDI into a country requires more than just verbal rhetoric but a conscious effort to put in place pragmatic policies and strategies to pull foreign investors from the competitive world of business. Essentially, this study has looked at FDI inflows with primary focus on

examining the effect of banking sector stability on FDI inflow into Ghana. To do this the study employed three variables to measure the stability of the banking sector which include the capital adequacy of the banking sector, the ROA of the banking sector, and liquidity of the banking sector. Considering the outcome of the study, the following conclusions are made in the next paragraphs.

It is concluded that improving the capital adequacy of banks do not always yield a boom in FDI inflows into a country since investors as rational beings look beyond only capital adequacy of the banks. Nonetheless, it remains an important measure of ensuring a stable banking sector which continues to be relevant in attracting FDI inflows. It is also concluded that although the banking sector liquidity does not strongly affect investors quest to send FDI into the Ghanaian economy, yet they the liquidity of the sector cannot be downplayed. This is because having strong adequate banking sector liquidity together with other key policies measures of the government plays a critical role in drawing FDI into the country. Besides, emphasis must be made that ensuring a strong liquidity of the banking sector is very crucial to enhance the survival of firms in general since stable banks stand in better position to advance loans and capital to firms to undertake major investment which cannot be financed from the internal financial resources of the companies.

5.3 Recommendations

In view of the outcome of the study, the following recommendations are made for policy consideration. First and foremost, it is seen from the outcome of the study that stability of the banking sector measured by ROA positively affects FDI inflows into the Ghanaian economy. Therefore, it is recommended that policy makers and key

stakeholders of the banking sector should develop and implement appropriate strategies that ensure continued improvement of the banking sector ROA which is a necessary element for the development of the banking sector. This is important because banks as financial intermediaries play a critical service such as investment and repatriation of dividends for foreign investors.

Moreover, although improvement in the capital adequacy and liquidity of the banking sector did not prove to draw FDI inflows into the Ghanaian economy, they still remain an indispensable element for the effective, efficient, and robust functioning and development of the banking sector. Therefore, it is recommended that policy makers and major stakeholder within the banking sector take steps to continually strengthen the capacity of the sector with regards to its capital adequacy and liquidity indicators. This is crucial because foreign investors do not only look for the development of the banking sector of the economy but are also concerned about the efficiency and effectiveness of the banks and the banking sector in general in the delivery of their role as financial intermediaries. Also, the outcome of this study is based on some selected measures of banking sector stability which are capital adequacy, ROA, and Liquidity. To enhance the generalizability of the findings, it is recommended that other measures of banking sector stability be added in the conduct of future research. Also, since the banking sector is only an aspect of the overall financial system, it is recommended that future studies focus attention on looking at the relationship between the stability and development of the general financial system and FDI inflows into Ghana. Finally, it is recommended that future studies should focus attention on inter-sectoral development and FDI inflows into the sectors since it also remains an unexplored area in research in Ghana.

REFERENCES

Adams, K., Debrah, Y.A., Williams, K. and Mmieh, F. (2014). Causes of financial FDI inflows into sub-Saharan Africa (SSA): Evidence from Ghana. *Thunderbird International Business Review*, *56*(5), pp.439-459.

Adeniyi, O.A., Omisakin, D., Olusegun, A., Egwaikhide, F. and Oyinlola, A. (2012). Foreign direct investment, economic growth and financial sector development in small open developing economies. *Economic Analysis & Policy*, *42*(1), pp.105-127.

Albulescu, C.T., Briciu, L. and Coroiu, S.I. (2010). Determinants of foreign direct investment in CEECs: the role of financial stability. *Scientific Annals of the "Alexandru Ioan Cuza". Economic Sciences Section, Special Issue*, pp.85-96.

Anyanwu, C.M. (2010). An overview of the current banking sector reforms and the real sector of the Nigerian economy, *Economic and Financial Review,* 48(14), pp. 31-54.

Armah, M.K. (2016). Infrastructure and foreign direct investment inflows: Evidence from Ghana. *Journal of Emerging Trends in Economics and Management Sciences, 7*(1), pp.57-66.

Asiamah, M., Ofori, D. and Afful, J. (2019). Analysis of the determinants of foreign direct investment in Ghana. *Journal of Asian Business and Economic Studies*, 26(1), pp. 56-75.

Bhasin, N. (2012). *Foreign Direct Investment (FDI) in India: Policies, Conditions, and Procedures*. New Century Publications.

Bhatnagar, V. K. (2013). Impact of foreign direct investment on the profitability: A case study of Telecom companies in India, Published in Edited book, *Foreign*

Direct Investment in Indian Retail Sector, Indus Valley Publications, Jaipur, pp.298-305.

Boateng, E., Amponsah, M., and Annor Baah, C. (2017). Complementarity Effect of Financial Development and FDI on Investment in Sub-Saharan Africa: A Panel Data Analysis. *African Development Review*, *29*(2), pp. 305-318.

Coy, A.G. and Comican, H.F. (2014). Foreign direct investment and economic growth: a time series approach, *Global Economy Journal*, 6(1), pp. 7-9.

Dal Maso, L., Kanagaretnam, K., Lobo, G.J. and Terzani, S., 2018. The influence of accounting enforcement on earnings quality of banks: Implications of bank regulation and the global financial crisis. *Journal of Accounting and Public Policy*, 37(5), pp.402-419.

Degryse, H. and Ongena, S. (2008). Competition and regulation in the banking sector: A review of the empirical evidence on the sources of bank rents. *Handbook of financial intermediation and banking*, *2008*, pp.483-554.

Etim, R.S., Jeremiah, M.S. and Jeremiah, O.O. (2019). Attracting Foreign Direct Investment (FDI) In Nigeria through Effective Tax Policy Incentives. *International Journal of Applied Economics, Finance and Accounting*, *4*(2), pp.36-44.

Fatima, N., 2014. Capital adequacy: A financial soundness indicator for banks, *Global Journal of Finance and Management*, 6(8), pp.771-776.

Frimpong, J.M. and Oteng-Abayie, E.F. (2006). Bivariate causality analysis between FDI inflows and economic growth in Ghana.

Goldberg, L.S., 2009. Understanding banking sector globalization. *IMF Staff Papers*, *56*(1), pp.171-197.

Gyebi, F., Owusu, M. and Etroo, J.K. (2013). Foreign direct investment and gross domestic Product in Ghana. *International Journal of Academic Research in Accounting, Finance and Management Services*, *3*(3), pp.256-65.

Hussain (2012) study the determinants of FDI inflows to developing countries using the macro panel data of middle-income countries.

Insah (2013) pursue a study on FDI inflows and economic growth in Ghana foreign direct investment inflows and economic growth in Ghana. *International Journal of Economic Practices and Theories*, *3*(2), pp.115-121.

Jin, J.Y., Kanagaretnam, K. and Liu, Y., 2018. Banks' funding structure and earnings quality. International Review of Financial Analysis, 59, pp.163-178.

Kaur, M., Yadav, S.S. and Gautam, V. (2013). Financial system development and foreign direct investment: A panel data study for BRIC countries. *Global Business Review*, *14*(4), pp.729-742.

Kim, H., 2010. Political stability and foreign direct investment. *International Journal of Economics and Finance*, *2*(3), pp.59-71.

Kwoba, M.N. and Kibati, P. (2016). Impact of Selected Macro Economic Variables on Foreign Direct Investment in Kenya. *International Journal of Economics, Finance and Management Sciences*, *4*(3), pp.107-116.

Markusen, J.R. and Venables, A.J. (1999). Foreign direct investment as a catalyst for industrial development. *European economic review*, *43*(2), pp.335-356.

Mitsakis, F.V. (2014). The impact of economic crisis in Greece: key facts and an overview of the banking sector. *Business and Economic Research*, *4*(1), pp. 250-267.

Moon, H.C., Cheng, J.L., Kim, M.Y. and Kim, J.U. (2011). FDI, economic decline and recovery: lessons from the Asian financial crisis. *Multinational Business Review*. 19(2), pp. 120 – 132.

Musah, A., Gakpetor, E.D., Kyei, S.N.K, Akomeah, E. (2018). Foreign Direct Investment (FDI), Economic Growth and Bank Performance in Ghana, *International Journal of Finance and Accounting*, 7(4), pp. 97-107.

Nwosa, P. I., Agbeluyi, A. M., and Saibu, O. M. (2011). Causal relationships between financial development, foreign direct investment and economic growth the case of Nigeria. *International Journal of Business Administration*, *2*(4), p.93-102.

Nyarko, P.A., Nketiah-Amponsah, E. and Barnor, C. (2011). Effects of exchange rate regimes on FDI inflows in Ghana. *International Journal of Economics and Finance*, *3*(3), pp.277-286.

OECD 1996. *OECD benchmark definition of foreign direct investment*. OECD.

Oke, M.O. (2012). Foreign direct investment and the Nigerian financial sector growth. *Asian Economic and Financial Review*, *2*(2), pp.262-275.

Owusu-Antwi, G., Antwi, J. and Poku, P.K. (2013). Foreign direct investment: a journey to economic growth in Ghana-empirical evidence. *International Business & Economics Research Journal (IBER)*, *12*(5), pp.573-584.

Pan, S. (2015). An overview of Indian banking industry. *International Journal of Management and Social Science Research*, *4*(5), pp.67-71.

Rupeika-Apoga, R., Zaidi, S.H., Thalassinos, Y.E. and Thalassinos, E.I., 2018. Bank stability: The case of Nordic and non-Nordic banks in Latvia, *International Journal of Economics and Business Administration*, 6(2), 39-55.

Sghaier, I.M. and Abida, Z. (2013). Foreign direct investment, financial development and economic growth: Empirical evidence from North African countries. *Journal of International and Global Economic Studies*, *6*(1), pp.1-13.

Solomon, E. (2011). Foreign direct investment, host country factors and economic growth, *Ensayos Journal of Economics*, Vol. 30(1), pp. 4-7.

Swamy, V., 2014. Testing the interrelatedness of banking stability measures. Journal of Financial Economic Policy, 6(1), pp. 25-45.

Valla, N., Saes-Escorbiac, B. and Tiesset, M., 2006. Bank liquidity and financial stability. Banque de France Financial Stability Review, 9(1), pp.89-104.

APPENDIX

YEAR	LogFDI inflows	Capital Adequacy Ratio (%)	Return On Assets (%)	Core Liquid assets to total assets (%)	GDP growth rate (%)	Inflation, consumer prices (annual %)
2018	21.58723	19.27	3.39	26.03	4.844487	9.836993
2017	21.65044	18.55	3.58	25.96	7.899712	12.37192
2016	21.90118	18.04	3.76	27	14.04712	17.45463
2015	21.91553	17.81	4.64	26.43	9.292789	17.14997
2014	21.89482	17.93	6.62	26.81	7.312525	15.48962
2013	21.93622	18.45	6.22	21.71	2.897439	11.66619
2012	21.88401	19.08	4.85	24.13	2.178207	7.12635
2011	21.97183	17.41	3.86	27.83	3.447793	8.726837
2010	21.90346	19.13	3.8	25.33	8.143447	10.70757
2009	21.81822	18.24	2.83	26.27	6.263481	19.25071